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DISTRIBUTED MARITIME CAPABILITY: OPTIMIZED U.S. NAVY-U.S. COAST GUARD INTEROPERABILITY, A CASE IN THE SOUTH CHINA SEA

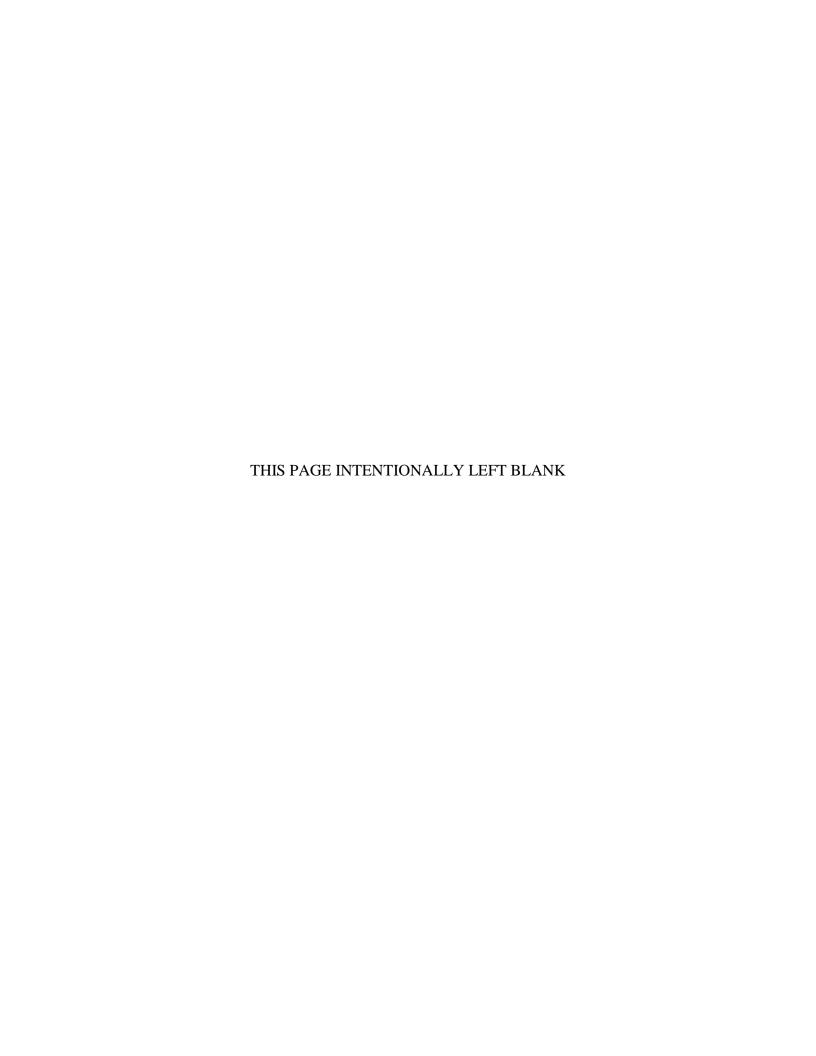
by

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13. ABSTRACT (maximum 200 words)

This thesis asks whether or not the U.S. Navy (USN) and U.S. Coast Guard (USCG) are sufficiently prepared to operate together if conflict escalates in an area of forward-deployed operations and investigates opportunities for naval interoperability to be bolstered if required. Today, the USN faces naval power constraints, specifically ship-force deficiencies. Comparatively, competitors like China are modernizing their naval forces, which are on a path to surpass U.S. naval power. The conclusion is that the USN and USCG are not yet adequately prepared to operate together if conflict arises abroad. One solution is to optimize USN–USCG interoperability through enhancing the USN distributed lethality concept to distributed maritime capabilities—the use of the USCG as a force multiplier.

The distributed maritime capability model is based on an examination of USCG capabilities during conflict as well as independent and joint naval operations. China is assessed to be a dominant aggressor in the South China Sea that poses a threat to regional security and economic stability—major U.S. national interests. Distributed maritime capability is demonstrated by applying the concept to fisheries enforcement in the South China Sea in order to suppress the Chinese Maritime Militia (CMM), which is identified through this thesis as China's primary means of coercion and the major threat to stability in the region.

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LIST OF ACRONYMS AND ABBREVIATIONS

A2AD anti-access area denial

ASEAN Association of Southeast Asian Nations

BCS Belize Coastguard Service

CCG Chinese Coast Guard
CG guided missile cruiser

CNO Chief of Naval Operations

CRS congressional research service

CSG carrier strike group

CSIS Center for Strategic and International Studies

CMM Chinese Maritime Militia
DDG guided missile destroyer

DOD U.S. Department of Defense

EEZ exclusive economic zone

FONOP freedom of navigation operations

GOPLAT gas and oil platform

IUU illegal, unreported, and unregulated

JIATF Joint Interagency Task Force

LCS littoral combat ship

LEDET law enforcement detachment

MIO maritime interdiction operations

MOU memorandum of understanding

NAVCOGSAG U.S. Navy-U.S. Coast Guard Surface Action Group

OMSI Oceania Maritime Security Initiative

PCA permanent court arbitration

PLAN China's People's Liberation Army Navy

QDR Quadrennial Defense Review

RFMO regional fisheries management organization

ROMO range of military operations

SAG surface action group

UN United Nations

UNCLOS United Nations Convention on the Law of the Sea

USCG U.S. Coast Guard

USCGC U.S. Coast Guard Cutter

USMC U.S. Marine Corps

USN U.S. Navy

USS United States Ship

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I. PROPOSING AN OPTIMIZED INTEROPERABILITY SOLUTION

A. MAJOR RESEARCH QUESTIONS

Since World War II, the United States has faced few naval surface-on-surface conflicts at sea. Meanwhile, threats on the high seas have never been more of a national security concern to the United States than they are now. Together, the proliferation of nuclear weaponry, ballistic missiles, and small arms, as well as the continued advancement of military technologies fueled by anti-American sentiments from state and non-state actors, pose significant dangers to the United States and its navy.

The U.S. sea service relies on its maritime strategy, through a forward naval presence and joint operations, to protect and defend its national interests. The U.S. Navy (USN) is the primary component of the U.S. sea service, supported by the efforts of the U.S. Coast Guard (USCG) and U.S. Marine Corps (USMC). The USN projects sea control throughout the globe and extends power projection far from its shores whereas the USCG regulates America's maritime ports and protects its coastline. Although the USCG can operate under the Navy in time of war, it currently serves as part of the Department of Homeland Security (DHS). Defense readiness is not the USCG's sole function. When compared to the USN, the USCG has limited weapon and combat system capabilities. However, the USCG has been relied upon in forward-deployed operating areas to defend and carry out U.S. security interests in de-escalated operational environments. Together, the USN and USCG have successfully collaborated their efforts in foreign and domestic waters to help each other succeed in maritime security operations, such as in the South China Sea with fishing enforcement.

Today, the USN fleet has down-sized in force strength due to defense budget constraints and the Navy's success in defending U.S. interests, establishing foreign state

¹ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower* (Washington, DC: Department of Defense, March 2015), 2, http://www.navy.mil/local/maritime/150227-CS21R-Final.pdf.

partnerships, and conducting joint service operations.² At the same time, however, competing global powers have been re-modernizing their militaries and advancing strategies in efforts to deny U.S. interests, and the USN recognizes the need for an increased force. *Distributed lethality* is a USN concept "increasing the offensive and defensive capability of individual warships, employing them in dispersed formations across a wide expanse of geography, and generating distributed fires" and has been named a priority.³ This thesis assesses how optimized interoperability between USN and USCG could address that need by creating *distributed maritime capability*, a concept that helps accomplish the mission of distributed lethality by bolstering the USN fleet with USCG forces. Specifically, this thesis asks the following research questions:

- As militaries are advancing their capabilities around the world, are the U.S. Navy and U.S. Coast Guard sufficiently prepared to operate together if conflict escalates in an area of forward deployed operations?
- If the U.S. Coast Guard needs to refocus on supporting U.S. Navy missions around the globe, what will this new U.S. Navy-U.S. Coast Guard interoperability look like?

B. SIGNIFICANCE OF THE RESEARCH QUESTIONS

The U.S. sea service, the Navy, Marine Corps, and Coast Guard, encompasses only a fraction of the U.S. armed forces' strength, but the sea service is critical for the execution of the U.S. strategic pillars: "defending the homeland; building security globally by projecting U.S. influence and deterring aggression; and remaining prepared to win decisively against any adversary should deterrence fail." All three naval services are forward stationed and have routinely deployed around the world to protect U.S. national interests. This thesis focuses centrally on capabilities at sea, and, thus, excludes the Marines as part of the naval forces analyses.

² U.S. Department of Defense, 2017 Defense Posture Statement: Taking the Long View, Investing for the Future (Washington, DC: Department of Defense, February 2016), 32, https://www.defense.gov/. Portals/1/Documents/pubs/2017DODPOSTURE_FINAL_MAR17UpdatePage4_WEB.PDF.

³ U.S. Navy, *Surface Force Strategy: Return to Sea Control*, (Commander, Naval Surfaces Forces), 5, http://www.navy.mil/strategic/SurfaceForceStrategy-ReturntoSeaControl.pdf.

⁴ U.S. Department of Defense, *Quadrennial Defense Review* (Washington, DC: Department of Defense, March 2014), I, http://archive.defense.gov/pubs/2014 Quadrennial Defense Review.pdf.

Former U.S. Secretary of Defense Ash Carter listed Iran, China, Russia, North Korea, and international terrorist organizations as top security concerns in his 2017 Defense Posture Statement.⁵ Iran, China, and Russia are especially concerning because of their aggressive nature toward the United States and U.S. partners in the Arabian Gulf, South China Sea, and Arctic regions where they have contended territorial claims and natural resources.⁶ In those regions, the USN and USCG have regularly conducted joint and multi-national exercises and operations as a show of force and to perform maritime security operations such as countering piracy, drug, transnational crime, and terrorism. Having been recognized as a leader in the international security sector, the United States has demonstrated success in maritime security operations.⁷ Due to the scope of this thesis, this analysis focuses solely on China. The basic reality is that the USN does not currently have enough ships to meet current needs. Therefore, this thesis's distributed maritime capability, or optimized USN–USCG interoperability concept offers a viable solution to ensure and protect U.S. interests abroad and at home.

A cautious consensus amongst U.S. leaders and experts is emerging that U.S. naval power could be on the verge of decline as rival competition upsurges and U.S. naval forces' developments seem to grow stagnant. Particularly. China is excelling at naval modernization efforts.⁸ Chief of Naval Operations Admiral John M. Richardson affirms that the United States has once again entered a period of "great power" competition with China.⁹ U.S. naval forces seem to struggle most at maintaining their

⁵ U.S. Department of Defense, 2017 Defense Posture Statement, 4.

⁶ Ibid., 4.

⁷ U.S. Coast Guard, *Sector Security Assistance Strategy* (Washington, DC, July 2015), 8, http://www.overview.uscg.mil/Portals/6/Documents/PDF/CG SSA%20FINAL%20JULY%202015.pdf?ver=2016-12-14-154323-697.

⁸ Karen Parrish, "Maritime Commanders Discuss Sea Service Priorities," DOD News, February 24, 2017, http://libproxy.nps.edu/login?url=http://search.proquest.com/docview/ 1871599315?accountid=12702.

⁹ Ibid.

bolstered fleets. The USN's new 355-ship force goal is decades away, and the USCG is challenged to recapitalize their out-of-date cutter fleet.¹⁰

Aside from the U.S. fleet-building challenges that point to rely more on USN and USCG teamwork, *A Cooperative Strategy for 21st Century Seapower* stresses the value of USN–USCG interoperability, and the Chief of Naval Operations publicly called for a new, bigger, and innovated fleet, now.¹¹

C. LITERATURE REVIEW

Around the world, executed joint military operations in forward areas of operation are impressive and effective force multipliers; historically, USN and USCG interoperability operations have been a testament to this claim. This literature review analyzes existing knowledge from Congressional Research Service (CRS) and intelligence agencies reports, U.S. defense and naval policies, testimonies from senior U.S. officials, first-hand military leadership accounts, and written work from various academics. Four sections lay the groundwork on the premise of pushing the envelope of the USN and USCG working relationship and assess their readiness to new threats. The first section, "Origins of Maritime Conflicts," examines escalated regional conflicts throughout the world and a need for USN–USCG interoperability missions. The second section, "A Likely Antagonist at Sea," examines significant threats that could endanger the U.S. interests and the U.S. naval services, specifically the USN and USCG. The third section, "Interoperability Efforts Countering Conflicts at Sea," reviews USN and USCG strategies in independent and combined operational efforts.

¹⁰ U.S. Navy, *Executive Summary*, 2016 Navy Force Structure Assessment (FSA), (Washington, DC: 2016), 2–3, https://news.usni.org/wp-content/uploads/2016/12/FSA_Executive-Summary.pdf; U.S. Coast Guard, Strategic Challenges Facing Our Nation—U.S. Coast Guard Perspective (Washington, DC, December 2016), 2, http://www.overview.uscg.mil/Portals/6/Documents/PDF/Strategic%20Challenges%20Facing%20our%20Nation_US%20Coast%20Guard%20Perspective_WITH%20COVER.pdf?ver=2016-12-12-142116-477.

¹¹ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, 36; Christopher P. Cavas, "CNO Urges Faster Path to Bigger Navy, Hints at Naval Warfare Transformation," DefenseNews: Naval, May 17, 2017, https://www.defensenews.com/naval/2017/05/17/cno-urges-faster-path-to-bigger-navy-hints-at-naval-warfare-transformation/.

1. Origins of Maritime Conflicts

The maritime domain is volatile, with conflict at sea caused by competition for energy and food resources as well as over territory. The oceans are full of resources such as oil and fish, which are needed for states to survive and grow. Taking a look at offshore U.S. oil production alone, "in 2016, about 18% of U.S. crude oil was produced from wells located offshore in the federally administered waters of the Gulf of Mexico."12 Additionally, over one billion people who reside in coastal regions rely on fish as a primary food source, and approximately 40 million people worldwide work and depend on the international fishing markets.¹³ The United States relies heavily upon these ocean resources for living and development, as do other nations around the world. As such, the United States recognized and encompassed these values as national interests to ensure its growth through economic stability.¹⁴ Energy security measures are needed to maintain economic stability and enforce regulations upon entities that exploit, abuse, and destroy energy resources exist.¹⁵ For example, in the South China Sea, oil and gas as well as fishery and aquaculture have faced decreasing resources and have driven people to expand their search for resources. 16 Regional disputed claims over ownership of parts of the South China Sea combined with weak maritime law enforcement enforcing maritime claims have incited conflicts between proximity nations competing for similar resources.¹⁷

^{12 &}quot;Oil: Crude Oil and Petroleum Products Explained: Where Our Oil Comes From," U.S. Energy Information Administration, June 8, 2017, https://www.eia.gov/energyexplained/index.cfm?page=oil where#tab1.

¹³ Gregory B. Poling et al., *Illegal, Unreported, and Unregulated Fishing as a National Security Threat* (Washington, DC: CSIS, 2017), 11, https://csis-prod.s3.amazonaws.com/s3fs-public/publication/171102 Poling IUUFishing Web.pdf?fxf ZS98YbFth8SnVM242pH0VutBYw2v.

¹⁴ Barack Obama, *National Security Strategy* (Washington, DC: Office of the President of the United States, February, 2015), 15, http://nssarchive.us/wp-content/uploads/2015/02/2015.pdf.

¹⁵ Energy security is the "assurance of the ability to access the energy resources required for the continued development of national power" and is linked to current and developing regional conflicts, even in the smaller corners of the world." Jan H. Kalicki and David L. Goldwyn, "Introduction: The Need to Integrate Energy and Foreign Policy," in *Energy & Security: Toward a New Foreign Policy Strategy*, ed. Jan H. Kalicki and David L. Goldman (Washington, DC: Woodrow Wilson Center Press, 2005), 9.

¹⁶ Lucio Blanco Pitlo III, "Fishing Wars: Competition for South China Sea's Resources," Pacific Forum CSIS: PacNet, no. 577, July 24, 2013, https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/publication/Pac1357.pdf.

¹⁷ Ibid.

David Sloggett argues that maritime security is associated with energy security.¹⁸ The seas also provide a means to transport and trade acquired resources like offshore oil and fish. Energy and economic security are U.S. national interests that inherently transpire into maritime security interests because of the investments and the risks taken to acquire, transport, manage, and protect goods at, to, and from the sea. However, the United States is not alone; other nations, including especially China, also share such similar interests. States implement maritime security operations to protect their claims over territories and resources, as well as over the connected sea lanes. When two or more countries pursue the same territory or resource, competition can unfold. Competition over securing resources could lead to conflict between blue-water state navies. The United States has historically been a participant in such contests.

In A Cooperative Strategy for 21st Century Seapower, the U.S. sea services leadership agreed on a commitment to "providing the secure environment necessary for an open economic system based on free flow of goods, protecting U.S. natural resources, promoting stability, deterring conflict, and responding to aggression." Today, the U.S. naval forces are forward stationed and operating in the Arabian Gulf and Asia-Pacific regions conducting maritime security operations to ensure freedom of navigation and support regional security. U.S. naval force leadership are looking toward the future and assessing ways to enhance maritime security in the Arctic region. 21

As the world faces natural energy constraints like dwindling oil reserves and fish stocks, and nations continue to make bold and excessive territorial claims, the potential exists for conflict to rise in the Arabian Gulf, South China Sea, and the Arctic region. Iran routinely operates its naval fleet of small boats and submersibles, which

¹⁸ David Sloggett, *The Anarchic Sea: Maritime Security in the Twenty-First Century* (London: Hurst & Company, 2013), 93, 160.

¹⁹ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, iii.

²⁰ Ibid., 13–14; U.S. Department of Defense, 2017 Defense Posture Statement, 20, 22.

²¹ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, A Cooperative Strategy for 21st Century Seapower, 18.

demonstrates capabilities to prevent adversary access to the Arabian Gulf.²² The Office of Naval Intelligence released a 2015 capabilities report on China's People's Liberation Army Navy (PLAN), which identified that China had favored its new coast guard force over its PLAN assets to enforce maritime claims.²³ Additionally, the USCG has reported that Russia, in addition to making continued Arctic extended continental shelf claims, intends to deploy two icebreaking corvettes with cruise missile capabilities to the Arctic by 2020.²⁴ These regional observations indicate these states' willingness to escalate militant stances if encountered by intrusive actions that challenge their future prosperity, which may not even be claims that the international community mutually endorses.

2. A Likely Antagonist at Sea

U.S. adversaries have attempted to restrict the United States from operating in international waters in its efforts to advance democracy, protect human rights, support allies, and build partnerships to promote regional stability. Studies have shown that China has put forth concentrated efforts to deny U.S. military control within the South China Sea. The 2017 Defense Posture Statement explicitly identifies that China is being monitored as one of several state powers that have "developed and are continuing to advance military systems that threaten our advantage in specific areas." The 2010 Naval Operations Concept and 2014 Quadrennial Defense Review (QDR) report both identified that the development of anti-access area denial (A2AD) strategies and capabilities are significant challenges to naval sea control. Other analysts suggest that A2AD technologies may lead to conflict at sea. Sam Tangredi, for example, claims, "the

²² Sloggett, *The Anarchic Sea*, 130.

²³ U.S. Department of Defense, *The PLA Navy: New Capabilities for the 21st Century* (Washington, DC: ONI, 2015), 45, http://www.oni.navy.mil/Portals/12/Intel%20agencies/China_Media/2015_PLA_NAVY_PUB_Print_Low_Res.pdf?ver=2015-12-02-081233-733.

²⁴ U.S. Coast Guard, Strategic Challenges Facing Our Nation—U.S. Coast Guard Perspective, 2.

²⁵ Barack Obama, *Sustaining U.S. Global Leadership: Priorities for the 21st Century Defense* (Washington, DC: Department of Defense, 2012), 1–2, http://archive.defense.gov/news/Defense_Strategic_Guidance.pdf; Obama, *National Security Strategy*, 19.

²⁶ U.S. Department of Defense, 2017 Defense Posture Statement, 5.

²⁷ U.S. Department of Defense, *Quadrennial Defense Review*, vii; U.S. Department of the Navy, *Naval Operations Concept 2010*: Implementing the Maritime Strategy (Washington, DC: 2010), 53 http://www.navy.mil/maritime/noc/NOC2010.pdf.

sea (and the control of it) has played a significant role in the historical development of international trade, global economy, and globalization," and *A Cooperative Strategy for 21st Century Seapower* assessed that A2AD capabilities impede the "free flow of goods and services.²⁸

Many experts believe China is maneuvering toward an establishment as a regional hegemonic state. In recent years within the Southeastern Asia region, China has extended its boundaries into the South China Sea and made excessive territorial claims beyond its exclusive economic zone to secure the resource-rich waters and to protect its sea lines of communications.²⁹ The U.S. Department of Defense (DOD) and the Center for Strategic and International Studies (CSIS) reinforce this viewpoint. A 2017 DOD report on China's Military Power analyzed land reclamations outside of China's legal sovereign territory on the Spratly Islands in the South China Sea; China constructed "military and civilian infrastructure" supporting "China's ability to detect and challenge activities by rival claimants or third parties, widen the range of capabilities available to China, and reduce the time to deploy them."³⁰ The CSIS claims that China's fishing fleets are "common violators of IUU [illegal, unreported, and unregulated] regulations."31 From an international standpoint, China has strived to create partnerships in South America and Africa to secure additional energy resources.³² Natural resources and overseas trading partners are at the center of China's foreign policy strategies and interests to finance its growing economy and military force.³³ Continued economic growth over time would enable China to advance its naval force capabilities.³⁴

²⁸ Sam J. Tangredi, "Globalization and Sea Power: Overview and Context," in *Globalization and Maritime Power*, ed. Sam J. Tangredi (Washington, DC: National Defense University Press, 2002), 17; U.S. Navy, U.S. Marine Corps, *U.S. Coast Guard*, *A Cooperative Strategy for 21st Century Seapower*, 8.

²⁹ Sloggett, *The Anarchic Sea*, 159–61.

³⁰ Michael Green et al., *Countering Coercion in Maritime Asia: The Theory and Practice of Gray Zone Deterrence* (Lanham, MD: CSIS, 2017), 12, https://csis-prod.s3.amazonaws.com/s3fs-public/publication/170505_GreenM_CounteringCoercionAsia_Web.pdf?OnoJXfWb4A5gw_n6G.8azgEd8zRIM4wq.

³¹ Poling et al., Illegal, Unreported, and Unregulated Fishing as a National Security Threat, 12.

³² Sloggett, *The Anarchic Sea*, 159–160.

³³ Sloggett, *The Anarchic Sea*, 160.

³⁴ Ibid., 170.

China's developing naval forces are concerning to U.S. interests abroad. *A Cooperative Strategy for 21st Century* identifies that China's naval expansion is a challenge in the Indian and Pacific Oceans.³⁵ China's naval forces currently outnumber the United States. As per the USN's public "Status of the Navy" update, the United States currently maintains 279 deployable battle force ships.³⁶ The 2015 DOD *Asia-Pacific Maritime Security Strategy* reported that China's possesses an estimated combined naval force of 508 vessels.³⁷ Of those numbers, other analysts suggest that China's People's Liberation Army Navy (PLAN) maintains hundreds of Houbei class missile boats.³⁸ Other evidence that proves China's continued efforts to modernize the PLAN includes China's 2011 operationalized aircraft carrier, which could enable power projection capabilities around the world.³⁹ These observations suggest there will be increasing global rivalry over sea control between the United States and China.

Norman Friedman has made a case concerning anti-access strategies and military transformations. He questions whether states would better benefit from the development of defense technology based on future threats or potential enemy access technology. USN-USCG interoperability efforts have the opportunity to model this outlook. The 2014 QDR addresses the potential of future conflicts against advanced A2AD capabilities and how the DOD should prepare for a full spectrum of military operations. Development efforts should not be solely focused on outfitting weapons systems to specific platforms, but how to integrate different platform and service capabilities in new

³⁵ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, A Cooperative Strategy for 21st Century Seapower, 3.

³⁶ "Status of the Navy," U.S. Navy, accessed October 17, 2017, http://www.navy.mil/navydata/nav legacy.asp?id=146.

³⁷ U.S. Department of Defense, *Asia-Pacific Maritime Security Strategy: Achieving U.S. National Security Objectives in a Changing Environment*, (Washington, DC: DOD, 2015), 12–13, https://www.defense.gov/Portals/1/Documents/pubs/NDAA%20A-P_Maritime_SecuritY_Strategy-08142015-1300-FINALFORMAT.PDF.

³⁸ Seth Cropsy, *Mayday: The Decline of American Naval Supremacy* (New York: Overlook Duckworth, 2013), 171.

³⁹ Ibid., 164.

⁴⁰ Norman Friedman, "Globalization of Antiaccess?," in *Globalization and Maritime Power*, ed. Sam J. Tangredi (Washington, DC: National Defense University Press, 2002), 487.

⁴¹ U.S. Department of Defense, *Quadrennial Defense Review*, vii.

ways. The 2014 QDR also discussed the need for defense innovation; it called for "identifying new presence paradigms, including potentially positioning additional forward deployed naval forces in critical areas, and deploying new combinations of ships."⁴² Advancing USN–USCG interoperability in regions facing the potential for escalated conflict align with the 2014 QDR's initiative.

U.S. defense doctrines and strategies have made it clear that fiscal constraints have forced down-sizes throughout the DOD.⁴³ Both the USN and USCG have acknowledged the conditions and have made efforts to optimize the circumstances and continue to provide superior naval services. But over time, if the conditions persist adversaries could become more susceptible to challenge U.S. forces. A 2017 CRS analysis that assessed China's naval modernization against the USN reported that the PLA has not yet reached the same capabilities as the United States, however, it suggested that strategically the PLA does not need to dominate the United States itself but only its periphery, the South China Sea.⁴⁴ The CRS report estimated based on current military-development trajectories that over the next five to 15 years, the degree of dominance that the United States holds over China will reduce; as China advances in capability, China's military-political perspective could alter to believe they could undermine U.S. deterrence and interventions.⁴⁵ The growth and modernization of Chinese naval powers met with the constraints of USN and USCG provide further evidence to expand interoperability mission.

3. Interoperability Efforts Countering Conflicts at Sea

A primary U.S. naval strategy to protect U.S. interests, build foreign partnerships, deter conflict, and de-escalate hostilities in all regions around the world is the forward

⁴² Ibid., vi.

⁴³ Ibid., 56.

⁴⁴ Ronald O'Rourke, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, CRS Report No. RL33153 (Washington, DC: Congressional Research Service, 2017), 57.

⁴⁵ O'Rourke, China Naval Modernization, 57.

presence of U.S. naval forces.⁴⁶ The USN relies heavily on carrier strike groups complemented with sizeable naval surface combatants and numerous combat aircrafts in the Indo-Asia-Pacific, Middle East, and Europe regions to emit a forward presence because of their power projection capabilities that "enhance regional stability."⁴⁷ News reports reveal that USN forces do not necessarily reduce conflict tensions but instigate them. In February 2017, the aircraft carrier *USS CARL VINSON* (CVN 70) and the guided-missile destroyer *USS WAYNE E. MEYER* (DDG 108) conducted patrols in the South China Sea, whereby China refuted the operations stating, "China . . . firmly opposes any country's attempt to undermine China's sovereignty and security in the name of the freedom of navigation and overflight."⁴⁸ A new naval operational framework may be required to decrease U.S. combative representations at sea to encourage better regional stability partnerships like with China.

Some experts provided compelling USCG perspectives, which could benefit USN–USCG interoperability missions toward the greater U.S. naval strategy in deterring conflicts and deescalating hostilities around the world. Scholars suggest that coast guard forces are a less confrontational naval force compared to gray hulled navies. James D. Llwelyn and Lyle Morris both suggest concepts of using white hulled coast guard forces in non-traditional security concerns because they are "less militaristic" and perceived to be "less escalatory and possess limited war-fighting capabilities;" furthermore, coast guard forces create opportune conditions by avoiding military conflict, opening dialogues, and building levels of trust to peacefully engage in ongoing tense environments like in the South China Sea's maritime territorial disputes.⁴⁹ These non-kinetic ideas complement the *A Cooperative Strategy for 21* St. Century initiatives that seek

⁴⁶ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, 9–18.

⁴⁷ Ibid., 11, 13–14, 24.

⁴⁸ Azadeh Ansari and Brad Lendon, "USS Carrier Starts 'Routine' Patrols in South China Sea," *CNN*, February 20, 2017, http://www.cnn.com/2017/02/19/us/us-carrier-south-china-sea/index.html.

⁴⁹ Lyle Morris, "The Era of Coast Guards in the Asia Pacific are Upon Us," CSIS: Asia Maritime Transparency Initiative, March 8, 2017, https://amti.csis.org/era-coast-guards-asia-pacific-upon-us/; James D. Llewelyn, "Preventive Diplomacy and the Role of Civil Maritime Security Cooperation in Southeast Asia," *Strategic Analysis* 41, no. 1 (Jan, 2017): 49, ProQuest (1846065102).

a range of security options for the A2AD environment.⁵⁰ U.S. naval leaders are pursuing options to "include greater emphasis on force-wide, coordinated non-kinetic capability and counter-targeting techniques as opposed to engaging each threat with increasingly expensive kinetic weapons."⁵¹

While the USCG may represent a legitimate opportunity to peacefully address rising conflicts at sea, the USCG leadership and experts made it known that the USCG alone is ineffective. Kimberley Thachuk and Sam Tangredi argue that the USCG is "unsuited for high-end warfighting, particularly in the antiaccess environment." A 2017 CRS report cited the Vice Commandant of the Coast Guard acknowledges that the Coast Guard's small and aging fleet has inhibited its ability to perform missions in the Arctic and the South China Sea. Furthermore, the USCG published a strategic challenges document declaring that its cutter force with vessels exceeding 50 years of service is a growing challenge, and so is having to face "capacity constraints," which "limit our ability to act on all the intelligence we have." 54

In the meantime, while striving for less-lethal strategies to promote regional stability and protect economic securities, the USN has pursued enhancing its offensive capabilities. USN Vice Admiral Thomas Rowden, Commander of Naval Surface Forces, has recently called for Distributed Lethality as the surface navy's newest operational vision in maritime strategy.⁵⁵ Due to the proliferation of sea denial capabilities around the globe, VADM Rowden has attempted to shore up U.S. sea control. He has stressed to capitalize on individual unit lethality and increase the focus on offensive initiatives while further spreading the force around the globe to create greater operational challenges for

⁵⁰ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, 21.

⁵¹ Ibid., 21.

⁵² Kimberley L. Thachuk and Sam J. Tangredi, "Transnational Threats and Maritime Responses," in *Globalization and Maritime Power*, ed. Sam J. Tangredi (Washington, DC: National Defense University Press, 2002), 74.

⁵³ Ronald O'Rourke, *Coast Guard Cutter Procurement: Background and Issues for Congress*, CRS Report No. R42567 (Washington, DC: Congressional Research Service, 2017), 27.

⁵⁴ U.S. Coast Guard, *Strategic Challenges Facing Our Nation*, 2.

⁵⁵ Thomas Rowden, "Commander's Corner," Surface Warfare (Winter 2017): 3.

adversaries.⁵⁶ The USN commenced exercising Surface Action Group (SAG) deployments in the Pacific Ocean, which attached large surface combatants to an amphibious expeditionary strike group, and "up-gunned" a traditionally non-surface combatant platform.⁵⁷ An essential function of distributed lethality is an increased integration of unit capabilities to expand the radius of sea control; every ship is empowered to fight.

The USN and USCG currently exercise forms of interoperability strategies such as counterdrug and counterpiracy operations. The Joint Interagency Task Force-South (JIATF-South), which is composed of USN, USCG, and other agency forces, combats Colombian drug cartels smuggling cocaine into the United States.⁵⁸ USCG Law Enforcement detachments (LEDET) are an advanced interdiction boarding team that are deployed onboard USN warships to enhance the Navy's capability to interdict drugrunners as well as deter and protect transiting merchant shipping from piracy. In support of U.S. Central Command operations, USCG LEDET trained and operated with USN visit, board, search, and seizure teams to interdict suspected and identified pirate attack vessels in the Gulf of Aden and Somali basin regions.⁵⁹

The above studies show that interoperability among U.S. naval forces is an existing school of thought that is being explored to further U.S. interests. Whatever means the United States chooses to pursue in enforcing its interests around the world, Richard Kugler endorses the "U.S. defense strategy's call for flexible military capabilities." Kugler argues that "The need for flexibilities for a spectrum of wars will provide ample rationale for a large and diverse naval posture. Equally important, the

⁵⁶ Ibid., 2–3.

⁵⁷ Charles Johnson, "Pacific Surface Action Group: PACSAG Integrates, Strengthening Force," *Surface Warfare* (Winter 2017): 6.

⁵⁸ Evan Musing and Christopher J. Lamb, "Joint Interagency Task Force-South: The Best Known, Least Understood Interagency Success," *Institute for National Strategic Studies Strategic Perspectives*, no. 5, ed. Phillip C. Saunders (Washington, DC: National Defense University Press, 2011), 6, http://ndupress.ndu.edu/Portals/68/Documents/stratperspective/inss/Strategic-Perspectives-5.pdf.

⁵⁹ Aaron Renschler, "LEDET 406: A Personal Journey in Pirate Defense," *The Coast Guard Proceedings* 67, no. 1 (Spring 2012), https://www.uscg.mil/proceedings/archive/2012/Vol69_No1_Spr2012.pdf.

overseas naval presence will need to be adjusted and equipped that it fits effectively into this new doctrine of warfighting."60

D. POTENTIAL EXPLANATIONS AND HYPOTHESES

Change and uncertainty dominate the future of the maritime security environment.⁶¹ At the same time, the United States is committed to regional security and economic security around the globe. Due to adversarial developments, including innovating technologies, evolving capabilities, and shaping strategies, the United States remains challenged at fulfilling its national interests. The United States has had a reputation as the sole and supreme naval service operating throughout the world, yet A2AD capabilities have become more prevalent as adversaries are attempting to constrain U.S. forward presence, which is the United States' first layer of defense through its in-depth homeland security strategy. It has been evident that U.S. adversaries aspire to achieve the necessary capabilities to attain the seapower advantage. More to the point, adversaries like China are ramping up militarily while also strategically downplaying military operations to proceed toward their national interests and avoid a warmongering image.⁶² The literature reviewed here suggests that with adversaries on security paths striving to surpass the United States, U.S. security could be at risk; the United States must take immediate action to maintain the strategic advantage. China is progressively pursuing naval force build-ups with increased capabilities, and the USN is decades away from achieving its envisioned 355-ship supreme fleet and, therefore, must look for new and swift ways to retain naval dominance.⁶³

⁶⁰ Richard L. Kugler, "Naval Overseas Presence in the New U.S. Defense Strategy," in *Globalization and Maritime Power*, ed. Sam J. Tangredi (Washington, DC: National Defense University Press, 2002), 300.

⁶¹ Williams and O'Brasky, "A Naval Operational Architecture for Global Tactical Operations," 519.

⁶² U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2017* (Washington, DC: DOD, 2017), i, https://www.defense.gov/Portals/1/Documents/pubs/2017_China_Military_Power_Report.PDF?ver=2017-06-06-141328-770; Andrew Erickson, "The South China Sea's Third Force: Understanding and Countering China's Maritime Militia," *Hampton Roads International Security Quarterly*, (January 2017): 1, ProQuest (1854639508).

⁶³ O'Rourke, Navy Force Structure and Shipbuilding Plans, 3.

Consequently, the United States must increase naval interoperability efforts and the pursuit of "maritime forces capable of full-spectrum engagement and full-spectrum access assurance." Based on research thus far, it is possible to hypothesize an emerging opportunity between the USN and USCG:

- Yes, if conflict erupts, the USN and USCG are already adequately prepared to respond to threats towards the U.S. interests abroad. Although world powers like China are modernizing their militaries, they are still years away from even attaining comparable capabilities and proficiencies to the United States, and, therefore, do not represent a critical enough threat warranting substantial naval interoperability changes.
- No, the USN and USCG are not adequately prepared to respond to threats as a joint effort, and they do not need to be. The two naval forces are designed for specific operations in two separate maritime domains the high seas and the coastal homeland waters. The USN possesses advanced combat capabilities to command the seas and fight against increased military threats. Furthermore, USCG efforts must remain dedicated to U.S. homeland security missions.
- No, the USN and USCG are not yet adequately prepared for optimal interoperability in response to threats instigating conflicts abroad, and the United States must prioritize the implementation of a distributed maritime capability. USN–USCG interoperability could help leverage U.S. naval forces' dispersion and offensive capability vision through force multiplication. Distributed maritime capability would exercise joint distributed lethality because it would bolster U.S. naval ship force presence in an area of operation. The South China Sea provides an opportunity via fishing enforcement to apply this concept to counter China's aggression, which is inhibiting regional stability and hampering the region's economic security.

E. RESEARCH DESIGN

After completing a brief overview threat assessment of predominant security concerns in a contended geographical region — China in the South China Sea — that the United States is confronting, this thesis proceeds with an in-depth focus on China's coercive behavior and excessive maritime claims in the South China Sea. There are numerous U.S. Government policies and reports as well as academic works about U.S.

⁶⁴ Williams and O'Brasky, "A Naval Operational Architecture for Global Tactical Operations," 519.

and China national interests, historical and ongoing contexts to regional conflicts, and the possible risks of conflict escalation in the South China Sea.

This thesis first examines the history and current state of USN–USCG interoperability to try and answer if USN–USCG does, in fact, help leverage U.S. naval forces' capabilities. Then the thesis attempts to explain if a USN–USCG SAG would be a suitable interoperability solution; it will consider the concept of distributed lethality and determine how the USN and USCG could both contribute to the concept for an optimized USN–USCG interoperability approach. Finally, the thesis explores how the new USN–USCG interoperability framework could apply in the South China Sea.

F. THESIS OVERVIEW

Chapter II makes the case that a coast guard force is a significant naval force and demonstrates how the USCG is a highly capable coast guard force that can go beyond its current operational duties and extend homeland defense efforts. It determines how the USCG has experience working with the USN in effective, impactful ways and identifies best practices for USN-USCG interoperability. Chapter III examines the application of USN-USCG interoperability in the South China Sea to counter China's coercive nature, which includes inhibiting other Association of Southeast Asian Nations (ASEAN) countries to acquire essential resources like hydrocarbons and fish. The chapter begins with briefly discussing the significance of the United Nations Convention on the Law of the Sea and how it relates to the region. After examining U.S. interests in the South China Sea, the chapter continues with understanding the conditions leading to conflict and then how U.S. naval forces could de-escalate such conflicts in the region. It concludes by recommending a USN-USCG interoperability solution founded on fishing enforcement in the South China Sea. Chapter IV concludes the thesis with recommendations on how to capitalize on the United States' current force structure and maximize its offensive strength at sea.

II. ASSESSING THE VALUE GAINED FROM USN-USCG INTEROPERABILITY

A. INTRODUCTION

Chapter I introduced the question of whether the U.S. Navy (USN) and U.S. Coast Guard (USCG) are prepared to work together as foreign naval competition grows and explored what an optimized USN–USCG interoperability concept might look like. Today's defense initiatives demand urgent and innovative USN and USCG interoperabilities. This chapter examines USN and USCG effectiveness as a joint naval force and considers whether the USN and USCG possess a capacity to advance their interoperability relationship.

Senior U.S. naval leadership are expressing a hard-pressed desire for naval solutions that resemble revamped naval interoperability frameworks. In May 2017, U.S. Chief of Naval Operations Admiral John M. Richardson released *The Future Navy* white paper; in it, he argued that the USN needs to evolve to maintain its dominance and contend with growing security threats because the world powers like China are exponentially advancing in technology and competition, which complicates and pressures U.S. national interests.⁶⁵ The current and developing security environment requires the most advanced U.S. naval force that it could innovate.⁶⁶ Admiral Richardson identifies that "maritime traffic has risen by 400 percent over the last 25 years," and he theorizes that, over the next decade, the world's megacities could increase from 31 to 41 with many located within 100 miles of the coastlines.⁶⁷ Admiral Richardson proclaims to reporters that, "We need a bigger fleet, and we also need a different fleet, one that will be able to fight in new ways," and he emphasizes the timely necessity for a new fleet stating, "We need to act urgently to achieve the greater naval power as quickly as we can." ⁶⁸ A

⁶⁵ U.S. Department of the Navy, *The Future Navy* (Washington, DC: CNO, May 2017), 1–4, http://www.navy.mil/navydata/people/cno/Richardson/Resource/TheFutureNavy.pdf.

⁶⁶ U.S. Department of the Navy, *The Future Navy*, 1.

⁶⁷ Ibid., 1.

⁶⁸ Cavas, "CNO Urges Faster Path to Bigger Navy."

Cooperative Strategy for 21st Century Seapower explicitly called for improved USN and USCG interoperability like protecting from threats hindering maritime freedom of navigation.⁶⁹ The enhanced strategic operations between the USN and USCG could be an immediate solution for the Chief of Naval Operations.

Independently the USN and USCG are superior naval forces in their own right.⁷⁰ Equipped with naval combat capabilities, the USN is forward deployed to maintain global stability, deter aggression, and protect the United States from enemies abroad.⁷¹ Comparatively, outfitted with coastal security capabilities, the USCG patrols primarily U.S. shores and waterways to defend from internal and external threats as well as to ensure safety at sea.⁷² Historically, the USN and USCG have demonstrated the ability to work together under joint naval operations. The USN and USCG have shared a rich history in the country's national defense from the 1799 Quasi War against the French all the way to recent conflicts like Operation Iraqi Freedom in 2003. Today, the USN and USCG sustain a level of naval interoperability through joint-naval interdictions and routine exercises like the biannual Rim of the Pacific Exercise.

This chapter argues that the USCG is an exceedingly capable coast guard force, examines how the USCG benefited naval forces in times of conflict, and appraises historic and modern-day USN–USCG interoperability missions.

⁶⁹ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, 36.

⁷⁰ Sam Tangredi argues that the USN is the "sole global navy" because of U.S. interest in maintaining international security and protecting over globalization; similarly, Eric Grove claims how the United States reigns over all other navies as the only "Major Global Force Projection Navy–Complete." Furthermore, Geoffrey Till determines that the USCG is "powerful" according to his engineered coast guard spectrum. Sam J. Tangredi, "Globalization and Sea Power," 2; Eric Grove, "The Ranking of Smaller Navies Revisited," in Small Navies, ed. Michael MulQueen, Deborah Sander, and Ian Speller (Surrey, England: Ashgate Publishing Limited, 2014), 16, 19; Geoffrey Till, Seapower: A Guide for the Twenty-First Century, 2nd ed. (Hoboken: 2009), 316.

⁷¹ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, 22.

⁷² Ibid., 22, 26.

B. THE USCG, A COAST GUARD FORCE AND MORE

It is important to address the idea that many navies could function as coast guard forces, but not all coast guard forces could function as navies. Not all coast guard forces have the resources, capabilities, or political interests to effectively transition into a bluewater fighting force and sail as a deep-water navy. However, the USCG is an exception. Although the USCG is a coastal naval force, it also possesses navy capabilities. The USCG offers the opportunity and flexibility for effective USN and USCG interoperability operations to contend with wide ranges of threats.

Relatively, the size, capability, and maritime security interests distinguish a coast guard from a navy. Scholar of maritime security studies Geoffrey Till writes that many foreign navies are simply coast guards.⁷³ Naval historian Eric Grove defines navies as "forces capable of exerting force at sea."⁷⁴ Furthermore, he created a naval force ranking system from Major Global Force Projection Navy–Complete (ranked first), which possessed advanced technological capabilities and operated globally with the permanent stationing of units abroad, to token navies (ranked last at ninth), which was comprised of few numbered and small-sized patrol craft with only basic policing functions.⁷⁵ He based the rank analysis on various characteristics such as sea control, sea denial, power projection, number of assets types and sophistication of assets, and level of afloat support.⁷⁶ Grove assessed that navies from Ireland, Iceland, Brunei, Iraq, Nigeria, Ghana, Kenya, Uruguay, the Philippines, and Myanmar were, in fact, coast guard forces that ranked just above token navies, which served to safeguard their offshore zones primarily.⁷⁷

The USCG is larger than some navies and boasts comparable capabilities to a navy in and of itself, but it plays a dedicated homeland defense role. Within the U.S.

⁷³ Geoffrey Till, "Are Small Navies Different?," in *Small Navies*, ed. Michael MulQueen, Deborah Sander, and Ian Speller (Surrey, England: Ashgate Publishing Limited, 2014), 26.

⁷⁴ Grove, "Ranking of Smaller Navies Revisited," 15.

⁷⁵ Ibid., 16–17.

⁷⁶ Ibid., 15–16.

⁷⁷ Ibid., 19.

Department of Homeland Security (DHS), it manages a total of 11 homeland security and non-homeland security missions, which include "ports, waterways, and coastal security; drug interdiction; migrant interdiction; defense readiness; and other law enforcement.⁷⁸ Non-homeland security missions include marine safety, search and rescue, aids to navigation, living marine resources; marine environmental protection; and ice operations."⁷⁹

Outside of DHS duties, the USCG has many assets forward deployed around the world and has proven itself through active fighting in major U.S. wars. The USCG has played a significant role alongside the USN in every major conflict of the 20th and 21st century, including World War I, World War II, the Korean War, Vietnam, the Gulf Wars, and the War on Terror.⁸⁰ Representing and defending a country with a land area of 5,692,981 square miles and a population of 311,591,917 people, the U.S. Coast Guard operates around the globe with 56,000 members, 243 Cutters, 201 aircraft, and over 1,600 small boats.⁸¹

Comparatively, token navies that Grove highlighted, such as Belize, have limited patrol capacity. 82 One should first recognize that it would be unrealistic for a country the size of Belize, which measures 8,867 square miles and has a population of 331,900 people, to have a similar military force to the United States. 83 Country surveys have assessed Belize as politically stable with a robust democratic system; it has no real

⁷⁸ U.S. Coast Guard, *Coast Guard Publication 1: Doctrine for the U.S. Coast Guard*. U.S. Coast Guard (Washington, DC: USCG, February 2014), 55, http://www.overview.uscg.mil/Portals/6/Documents/PDF/CGPub_1-0_Doctrine.pdf?ver=2016-10-20-094949-363; U.S. Department of Homeland Security, *U.S. Coast Guard Overview* (Washington, DC: DHS, October 2016), 5, http://www.overview.uscg.mil/Portals/6/Documents/PDF/USCG_Overview.pdf?ver=2016-10-21-114442-890.

⁷⁹ Ibid., 5.

⁸⁰ Thomas P. Ostrom. *The United States Coast Guard and National Defense: A History from World War I to the Present* (Jefferson, North Carolina: McFarland and Company, Inc., Publishers, 2012), 5–6.

⁸¹ "United States: Executive Summary," Jane's IHS Markit, last modified September 19, 2017, https://janes.ihs.com/Janes/Display/amers010-nam; U.S. Department of Homeland Security, *U.S. Coast Guard: Overview*, 3.

⁸² Grove, "Ranking of Smaller Navies Revisited," 19.

^{83 &}quot;Belize: Introduction," Jane's IHS Markit, last modified January 27, 2017, https://janes.ihs.com/FightingShips/Display/1352399#Maritime%20patrol; "Belize: Executive Summary," Jane's IHS Markit, last modified December 9, 2015, https://janes.ihs.com/Janes/Display/j0011060003178.

existential threats aside from a low-risk, ongoing territorial dispute with Guatemala, their neighboring country as well as inter-gang violence and regional drug-trafficking.⁸⁴ Belize lacks the resources and capabilities to operate in a capacity other than necessary maritime security and defense as well as law enforcement. With no formal navy, Belize's maritime force, the Belize Coastguard Service (BCS), operates only 80 nautical miles off its coasts and includes 308 personnel operating a core of eight interceptor craft and two 100-foot offshore crafts for the purpose of "fighting narcotic trafficking and maritime crime, protection of fisheries and other marine resources, and disaster preparedness." The BCS small fleet, which is similar to the USCG's special response boats and patrol boats, is used primarily for coastal security and law enforcement duties near shore. ⁸⁶

While the Philippines maintains a formal Philippine Coast Guard service that functions in environmental protection, law enforcement, maritime security, maritime safety, and maritime search and rescue, the actual Philippine Navy is comparable to a coast guard.⁸⁷ The Philippine Coast Guard is challenged to protect its maritime security interests within the Philippine economic exclusive zone and requires its nation's navy to enforce the region. Grove describes the Philippine Navy as a coast guard navy because of its interest to only safeguard their offshore zones, the Western Philippine Sea.⁸⁸ The Philippines has a substantial navy capable of force projection, but the regionally close threat from China constrains the nation's use of its navy capabilities. Currently, the Philippines disputes claims over parts of the South China Sea—primarily the Scarborough Shoal and Spratly Islands—with China.⁸⁹ Larger than Belize, yet smaller than the United States, the Philippines consists of an area of 115,985 square miles and a

^{84 &}quot;Belize: Executive Summary."

⁸⁵ Ibid.

⁸⁶ U.S. Department of Homeland Security, The Cutters, Boats, and Aircrafts of the U.S. Coast Guard (Washington, DC: DHS, 2015), http://www.overview.uscg.mil/Portals/6/Documents/PDF/CG_Cutters-Boats-Aircraft_2015-2016_edition.pdf?ver=2016-10-19-153700-540, 142–43, 147.

^{87 &}quot;Function," Republic of the Philippines: Philippines Coast Guard, last modified December 10, 2013, http://www.coastguard.gov.ph/index.php/transparency/functions.

⁸⁸ Grove, "Ranking of Smaller Navies Revisited," 19, 22.

⁸⁹ "Philippines: Executive Summary," Jane's IHS Markit, last modified September 28, 2017, https://janes.ihs.com/Janes/Display/phils010-sea.

population of 96,710,000 people.⁹⁰ The Philippines Navy comprises of 22,000 sailors, four frigates, 12 corvettes, eight fast attack craft, and six amphibious warfare ships.⁹¹ The Philippines' naval fleet was partly made possible from U.S. assistance, which sold warships to the Philippines via the U.S. foreign military sales process.⁹²

Fundamentally, the USCG is distinct from some foreign navies and coast guard forces. An overbearing regional threat does not constrain the USCG. It also has the means to operate as more than just a coastal maritime security force and more in tandem with the goals and interests of the USN abroad.

C. USCG AND USN ROLES AND CAPABILITIES

After investigating the significance of the USCG, it is also relevant to examine historic evidence of the USCG as an independent and forceful naval surface combat force. The analysis of past examples will help make clear the need for increased USN and USCG interoperability in response to current global threats.

1. U.S. Coast Guard

As an independent fighting flotilla, the USCG is a force multiplier with significant heavy gun firepower. The USCG's high degree of readiness and mission flexibility allows it to operate offensively or defensively in war and effectively function at lower ranges of military operations during periods of tensions or neutrality. It has a long history of naval surface combatant experience in the twentieth century. World War II era USCG operations in the North Atlantic serves as a model case study of the USCG's capabilities to expand as region tensions escalated from peace to war. The USCG maintained an International Ice Patrol presence in the Arctic region since the Titanic's sinking in 1912.93 However, months prior to U.S. entrance into World War II and once

⁹⁰ Ibid.

⁹¹ "Philippines: Executive Summary," Jane's IHS Markit, last modified September 28, 2017, https://janes.ihs.com/Janes/Display/phils010-sea.

⁹² Ibid.

⁹³ Historical Section, Public Information Division, *U.S. Coast Guard, The Coast Guard at War: Greenland Patrol II* (Washington, DC: U.S. Coast Guard Headquarters, 1945), 4.

the Nazis invaded Denmark in April 1940, the United States deployed USCG cutters to Greenland to prevent Nazi control of the island, Greenland, which could have allowed the Nazis to further attack Allied ships and planes transiting the northern route and act as a "springboard to attack the Western Hemisphere." The region was saturated with Nazi submarines torpedoing Allied ships transporting supplies to England, but early on in the war, USCG cutters remained "unmolested for they were a familiar sight in those regions."95 The USCG cutter North Atlantic patrols were a regional norm, and they were perceived as a non-threat. As the war progressed, it became clear that the USCG acted as a show of force to Germany and conducted rescue operations for the attacked convoys. After the United States entered the war, the USCG conducted convoy escorts and antisubmarine warfare operations, which protected northern shipping lanes and prevented German occupation of Greenland. From 7 March 1942 to 21 March 1944, the USCGC SPENCER (WPG-36/WAGC-36) attacked 14 German U-boats sinking, two of them. 96 Moreover, between July and October 1944, the USCGC NORTHLAND (WPG-49), USCGC STORIS (WAGL-38), USCGC EASTWIND (WAG-279), and USCGC SOUTHWIND (WAG-280) "captured 60 Germans, attacked three enemy trawlers, and put two German weather/radio stations out of commission."97

Vietnam and Kosovo are two examples that highlight the USCG in an offensive and defensive naval force capacity. The USN requested USCG support in Vietnam due to the USCG's capabilities and experiences: specifically, in 1967, Secretary of the Navy Paul H. Nitze asked for five high endurance USCG cutters to augment forces. In addition to providing logistical support, "Squadron Three WHECs fired more than 77,000 five-inch shells in Vietnam naval support missions." In 1999, during the U.S. Kosovo

⁹⁴ Historical Section, Public Information Division, *U.S. Coast Guard, The Coast Guard at War: Greenland Patrol II* (Washington, DC: U.S. Coast Guard Headquarters, 1945), 4.

⁹⁵ Ibid., 4.

⁹⁶ Thomas P. Ostrom, *The United States Coast Guard in World War II: A History of Domestic and Overseas Actions* (Jefferson, North Carolina: McFarland and Company, Inc., Publishers, 2009), 72.

⁹⁷ Ibid., 84.

⁹⁸ Ostrom, The United States Coast Guard and National Defense, 52.

⁹⁹ Ibid., 52.

Campaign, the USCGC *BEAR* (WMEC-901) deployed to U.S. Navy Sixth Fleet specifically in the Mediterranean Sea, the Adriatic Sea, and the Black Sea to provide surveillance, search and rescue support, and combat escort duties for U.S. Army transport ships shipping between Italy and Albania in the Adriatic Sea.¹⁰⁰

The review of the USCG's performances in major twentieth-century conflicts exemplified the service's dependability in national defense capacities. When called upon, the USCG effectively responded as a substantial fighting force. The USCG provided useful combat capability to include naval surface fire support, anti-submarine warfare capability, and combat escort capacity – all missions performed by modern-day USN surface combatants.

2. U.S. Navy

As a maritime nation, the United States relies heavily on a superior navy to afford command of the sea so that it can harness *seapower*, the conceptual ability to influence the behavior of another actor at or from the sea to determine events at sea and ashore, around the globe. ¹⁰¹ The USN maintains a forward presence globally to prevent wars, but also, if necessary, win wars. ¹⁰² Its mission is "to maintain, train, and equip combat-ready naval forces capable of winning wars, deterring aggression and maintaining freedom of the seas." ¹⁰³

The USN is composed of 324,460 active duty sailors, 279 deployable battle force ships, and over 3700 operational aircraft. The surface fleet is fundamentally characterized as forward, visible, and ready, which amount to "operating forward," "a persistent visible presence," and "providing credible combat power . . . ready to respond when called upon." According to the Commander of U.S. Naval Surface Forces Vice

¹⁰⁰ Ostrom, The United States Coast Guard and National Defense, 139.

¹⁰¹ Till, *Seapower*, 21.

¹⁰² U.S. Department of the Navy, Naval Operations Concept 2010, 2.

 $^{^{103}}$ "Navy: Organization," U.S. Navy, accessed October 17, 2017, <code>http://www.navy.mil/navydata/organization/org-top.asp.</code>

^{104 &}quot;Status of the Navy."

¹⁰⁵ U.S. Navy, Surface Force Strategy, 5.

Admiral Rowden, "the objective of the Surface Force Strategy is to achieve and sustain sea control at the time and place of our choosing to protect the homeland from afar, build and maintain global security, project the national power of the United States, and win decisively." ¹⁰⁶

The Carrier Strike Group (CSG) could be considered the essence of the USN surface forces to achieve these ends. As Geoffrey Till points out, the World War Two Pacific Campaign from 1944 to 1945 established the aircraft carrier as the U.S. fleet's capital ship. 107 The current CSG is composed of a variety of naval assets, including an aircraft carrier, a cruiser, four to six destroyers, and fixed-wing and rotary-wing aircraft. 108 The CSG provides "sustained maritime power projection" in all environments, and it is capable of integrated air and missile defense, ballistic missile defense, long-range strike warfare, anti-submarine warfare, anti-surface warfare, and anti-air warfare. 109

Distributed lethality could improve CSGs' power projection capabilities and promote deterrence at sea. Tactically, "it increases unit lethality and reduces the susceptibility of warships to detection and targeting," whereas operationally, "it employs warships as elements of offensive Adaptive Force Packages that are task oriented and capable of widely dispersed operations." Vice Admiral Rowden identifies the fact that "navies cannot persistently project power from water space they do not control. Nor can navies guarantee the free movement of goods in the face of a power-seeking adversary whose objective is to limit the freedom of maritime commons within their sphere of influence. Sea control is the necessary precondition for virtually everything else the Navy does, and its provision can no longer be assumed." 111

¹⁰⁶ U.S. Navy, Surface Force Strategy, 5.

¹⁰⁷ Till, *Seapower*, 125.

¹⁰⁸ "U.S. Navy Carrier Strike Group," U.S. Navy, accessed October 17, 2017, http://www.navy.mil/management/photodb/photos/160601-N-RT381-1001.JPG.

^{109 &}quot;U.S. Navy Carrier Strike Group."

¹¹⁰ U.S. Navy, Surface Force Strategy, 7.

¹¹¹ Thomas Rowden, Peter Gumataotao, and Peter Fanta, "Distributed Lethality," *Proceedings* 14, no 1 (January 2015), https://www.usni.org/magazines/proceedings/2015-01/distributed-lethality.

A mixed group of surface combatants called "hunter-killer Surface Action Groups (SAGs) is the USN's solution to "exploiting seized areas of localized sea control to generate larger combat effects." The strategy intends to force an opponent's defenses awry. As Vice Admiral Rowden further explains, "the objective is to cause the adversary to shift his own defense to counter our thrusts. He will be forced to allocate critical and limited resources across a larger set of defended targets, thereby improving our operational advantage to exploit adversary forces." 113

With only 11 available aircraft carriers in comparison to 94 surface combatants consisting of cruisers, destroyers, and littoral combat ships, distributed lethality appears to be the way ahead in securing the oceans. The distributed lethality concept widens the possibility for naval innovation. USN and USCG interoperability through the composition of USN warships and USCG cutters could be a new means to ensure U.S. national security interests. This thesis proposes a modified distributed lethality concept to include the USCG, a distributed maritime capability.

D. USN-USCG INTEROPERABILITY

An increased USN–USCG interoperability framework—a distributed maritime capability—could be the edge the United States requires to stay ahead of growing seapower competitors around the world. The U.S. Chief of Naval Operations expresses concern regarding the changing and exploiting "character of naval competition and warfare" among world competitors. The Office of Naval Intelligence assesses that "China's force modernization has concentrated on improving quality of its force, rather

¹¹² Thomas Rowden, Peter Gumataotao, and Peter Fanta, "Distributed Lethality," $Proceedings\ 14,$ no 1 (January 2015), https://www.usni.org/magazines/proceedings/2015-01/distributed-lethality.

¹¹³ Ibid.

^{114 &}quot;United States Navy Fact File: Aircraft Carriers—CVN," U.S. Navy, last modified January 31, 2017, http://www.navy.mil/navydata/fact_display.asp?cid=4200&tid=200&ct=4; "United States Navy Fact File: Cruisers - CG," U.S. Navy, last modified January 09, 2017, http://www.navy.mil/navydata/fact_display.asp?cid=4200&tid=800&ct=4; "United States Navy Fact File: Littoral Combat Ships—Fleet Introduction and Sustainment - LCS," U.S. Navy, last modified May 05, 2017, http://www.navy.mil/navydata/fact_display.asp?cid=4200&tid=1650&ct=4; "United States Navy Fact File: Destroyers—DDG," U.S. Navy, last modified July 17, 2017, http://www.navy.mil/navydata/fact_display.asp?cid=4200&tid=900&ct=4.

¹¹⁵ U.S. Department of the Navy, *The Future Navy*, 2.

than its size."¹¹⁶ As a result, the CNO calls for innovation to achieve greater naval power through new technologies, capabilities, and operating concepts. ¹¹⁷ USN and USCG interoperability is not necessarily a new concept altogether. Distinct from the USCG's independent performances, the two naval services also historically proved joint success in wartimes. Furthermore, most recently, the USN and USCG have demonstrated value in joint works through Maritime Interception Operations (MIO) like interdiction of illegal weapons, drugs, and piracy, which could offer best practices insight to an enhanced naval power. Through traditional naval interoperability, ranges of military operations expanded and risk of conflicts was suppressed.

1. Historic Accounts

A review of historical USN-USCG interoperability accounts help illustrate early joint naval operations that inherently created a bond of trust between the two maritime services and efficiently contributed toward the victories of World War I and World War II. These events set the stage for the remainder of this chapter because they offer historical precedence to current USN and USCG interoperability operations through demonstrating the USCG's combat support functions, separate from homeland security missions, as well as showing a seamless command integration within the USN.

World War I exemplified how well the USN and USCG could work together. In World War I, "the U.S. Coast Guard contributed 15 cruising cutters, 5,000 enlisted men, and 200 officers to the Navy," which significantly contributed toward the anti-submarine warfare efforts, search and rescue, and convoy escorts. Primitive USN and USCG interoperability efforts started off with augmenting Navy vessels with coast guard personnel. For example, "U.S. Coast Guard officers were assigned to five U.S. Navy ships that 'planted' mines and patrolled the Northern Mine Barrage that stretched from Norway to Scotland across the North Sea. 119 Furthermore, U.S. Secretary of the Navy

¹¹⁶ U.S. Department of Defense, *The PLA Navy*, 5.

¹¹⁷ U.S. Department of Defense, *The PLA Navy*, 1, 5.

¹¹⁸ Ostrom, The United States Coast Guard and National Defense, 14.

¹¹⁹ Ibid., 16.

Josephus Daniels expressed high confidence in the USCG officers' naval capabilities by emphasizing how "twenty-four commanded combatant ships operating in European waters, five vessels of patrol forces in the Caribbean, and twenty-three combatant crafts attached to naval districts." ¹²⁰

USN confidence instilled from the USCG's successful performances in World War I later shaped World War II naval strategies. 121 A totaled 242,093 Coast Guardsmen served alongside the other military branches in World War II. 122 In World War II, Coast Guardsmen again integrated with sailors onboard vessels such as USN destroyers, landing crafts, and USCG cutters. 123 Naval combat interoperability during the war attuned USN and USCG force familiarity because of the range of missions both naval forces partnered in. Armed with sonar, radar, depth charges, deck guns, and small arms, the USCG operated across the Atlantic, Mediterranean, and Pacific regions. 124 On the Atlantic front, the USCG team was again essential to anti-submarine warfare operations. The U.S. Eastern Sea Frontier under the command of Rear Admiral Adophus Andrews (USN) relied on USCG cutters, USN Destroyers, and other U.S. military aircrafts to manage the fight against German U-Boats. 125 The USN and USCG strength were also crucial within the Pacific theater, especially in amphibious assaults. The USCG was instrumental in landing troops ashore and providing naval fire support. It assisted the USN in support of the American occupation of Iwo Jima on February 19, 1945 with landing "marine divisions, vehicles, food, water, arms and ordnance, and other combat gear." 126 Moreover, leading to the 1944 Marshall Campaign success, "U.S. Navy battleships, cruisers, and Coast-Guard-manned destroyer-type frigates provided combat support and delivered devastating gunfire upon entrenched Japanese forces."127 The

¹²⁰ Ostrom, The United States Coast Guard and National Defense, 16.

¹²¹ Ibid., 18.

¹²² Ibid., 21.

¹²³ Ostrom, The United States Coast Guard and National Defense, 27.

¹²⁴ Ibid., 27.

¹²⁵ Ostrom, The United States Coast Guard in World War II, 40.

¹²⁶ Ibid., 153–154.

¹²⁷ Ibid., 150.

culmination of USN and USCG interoperability was critical through the War and helped push the U.S. to achieve victory in the Second World War. If the naval forces had not operated with a high degree of trust, understood one another's capabilities, or aligned under a unified command as they did in the Marshall Campaign, then perhaps the campaign could have resulted in dire consequences.

2. Maritime Interdiction Operations (MIO)

In the current globalized era, U.S. focus has shifted from a conventional naval warfare mindset as described in the previous World War I and II examples and toward an increased defense readiness posture against unconventional maritime threats. As such, the USN and USCG framework has drifted toward maritime interdiction operations (MIO) to ensure maritime security and good order at sea while countering asymmetric threats. However, even with modern day missions, many of the interoperability-building characteristics identified in the previous section also carried forward to today. Asymmetric threats include state and non-state actors using "the unconventional strategies that self-proclaimed enemies of the United States, unable to stand up to U.S. conventional military power, have increasingly adopted to achieve their aims." ¹²⁸ MIO includes interdiction of trafficked military-related resources and drugs to the suppression of piracy and terrorism. The USN and USCG interoperability teams have traditionally been crucial in combating these threats. As opposed to an independent operating warships or cutters, joint USN and USCG teams enabled greater flexibility and specialization of operations because the surface combatants had increased law enforcement and interdiction capabilities and skills, the unit was geographically less constrained, and the unit appeared less threatening to contacts and enabled greater cooperation.

Inhibiting the transfers of illegal weapons like the ones smuggled into Iraq at the turn of the twenty-first century is one form of MIO that was effective because of USN and USCG interoperability. The United Nations (UN), through sanctions authorized the

¹²⁸ Frank G. Hoffman and Sam J. Tangredi, "Characteristics and Requirements of the Evolving Security Environment," in *Globalization and Maritime Power*, ed. Sam J. Tangredi (Washington, DC: National Defense University Press, 2002), 31; Edward Feege and Scott C. Truer, "Homeland Security: Implications for the Coast Guard," in *Globalization and Maritime Power*, ed. Sam J. Tangredi (Washington, DC: National Defense University Press, 2002), 441.

United States to confront the problem of illegal weapons proliferation. While blockading the free flow of trade is illegal and perceivable as an act of war, UN sanctions authorized the United States to block Iraqi maritime movements during Operation Iraqi Freedom. 129 USN and USCG MIO interoperability proved successful. One example of success was "the USS *CHINOOK* and USCGC *ADAK* jointly boarded an Iraq tugboat and discovered drums containing mine-laying equipment." Separately, port security operations, which used MIO tactics also proved to be another compelling use of combined USN and USCG assets. Some port security operations required both USN and USCG vessels to secure critical harbors and structures like the gas and oil platforms (GOPLATs) against Iraqis forces. GOPLATs were targets for potential environmental attacks or bases of operations for Iraqi small boats. 131 The use of cutters and law enforcement detachments onboard (LEDET) USN patrol boats were ideal during OIF because they increased the flexibility to maneuver around GOPLATS and expanded naval reach into the littorals. The shallow areas off the coast of Iraq inhibited larger warships from operating in the coastal waters. 132

3. MIO-Counterdrug

Maritime counterdrug interdiction is another successful USN and USCG interoperability effort that stresses USN and USCG compatibility for future innovative naval concepts. While the USCG spearheads drug trafficking to and from the United States, it relies heavily on other agencies and services, especially the USN. Under the 1999 established Joint Interagency Task Force–South (JIATF-South), entities from "four

¹²⁹ Thachuk and Tangredi, "Transnational Threats and Maritime Responses," 68; Ostrom, *The United States Coast Guard and National Defense*, 140.

¹³⁰ Ibid., 142.

¹³¹ William H. Thiesen, "Guardians of the Gulf: A History of Coast Guard Combat Operations in Support of Operation Iraqi Freedom, 2002–2004," U.S. Coast Guard: Atlantic Area Historian's Office, accessed October 17, 2017, 6, https://media.defense.gov/2017/Jul/02/2001772360/-1/-1/0/USCGINOIF.PDF.

¹³² Ibid., 1.

military services, nine separate federal agencies, and eleven partner nations" support maritime and air interdictions operations within the Western Hemisphere. 133

The structure of counterdrug interdictions between the USN and USCG include USN vessels and aircraft and the USCG LEDET, which is made up of five to six Coast Guardsmen. The Posse Comitatus Act inhibits military units from direct intervention as law enforcement officials, however, Title 14 of the U.S. Code provides the USCG with a law enforcement authority, thereby, to board any vessel subject to U.S. jurisdiction, or to the operation of any U.S. law, to make inquiries, examinations, inspections, searches, seizures, and arrests upon the high seas and waters over which the U.S. has jurisdiction. The LEDET onboard USN warships also train and direct sailors to assist in maritime interdiction boardings.

With the support of the USCG and other agencies, USN warships conduct surveillance, reconnaissance, and target prosecution of operations. ¹³⁷ In an overview, the counterdrug interdiction process is composed of detection and monitoring, approaching and visiting, and law enforcement. ¹³⁸ The success of operations results from high degrees of trust and force familiarity between USN and USCG units. The USN commander retains control of the ship, but in the transition to the law enforcement action, the USCG assumes tactical control over operations due to Title 14 vested authority. ¹³⁹ During joint operations, both naval services must be aware of the other's capabilities and limitations to avoid operational failures. If either the USN or USCG units would enter an extremist situation, the additional unit must be able to recognize it and be ready to step in and assist.

¹³³ Tim Doorey, "Maritime Domain Awareness," in *Global Response to Maritime Violence*, ed. Paul Shemella (Stanford, CA: Stanford University Press, 2016), 130–131.

¹³⁴ Thachuk and Tangredi, "Transnational Threats and Maritime Responses," 65–66.

¹³⁵ U.S. Coast Guard, Coast Guard Publication 1, 11.

¹³⁶ Thachuk and Tangredi, "Transnational Threats and Maritime Responses," 66.

¹³⁷ Munsing and Lamb, Joint Interagency Task Force-South, 50.

¹³⁸ Ibid., 50.

¹³⁹ Ibid., 50.

The USN and USCG, with the support of other agencies, have shown exceptional performance and cooperation in the fight against drug proliferation. In 2009, JIATF-South exceeded five-fold in cocaine disruptions over all other U.S. Government entities with 200 metric tons of cocaine disruptions compared to other government agencies who totaled only 40 metric tons. ¹⁴⁰ Over the years, the USCG continued to prove their value in drug interdiction efforts. In FY2016, the USCG seized 443,000 pounds of cocaine and apprehended 585 suspected drug smugglers, which surpassed the service's 2008 record of 367,000 pounds of cocaine. ¹⁴¹ USCG drug interdiction teams also worked effectively outside the Western Hemisphere like in the U.S. Navy's Fifth Fleet area of operation, which includes the Arabian Gulf, the Gulf of Oman, the Red Sea, and the Arabian Sea. In May 2009, the USS *ANZIO* (CG-68) and its LEDET interdicted four tons of hashish in the Gulf of Aden. ¹⁴²

4. MIO-Counter-Piracy

USN and USCG LEDET integrated operations also translate well into combating piracy on the high seas. In January 2009, Combined Task Force 151 was assembled as a joint service and multi-nation initiative to oppose piracy in the Horn of Africa and Gulf of Aden. In May 2009, the USS *GETTYSBURG* (CG-64) linked with LEDET 409 seized rocket-propelled grenades and assault rifles onboard a pirate mother ship located off the coast of Somalia. It The United Nations Convention on the Law of the Sea (UNCLOS) defines maritime piracy as "an attack mounted for private ends on a ship, involving violence, illegal detention of persons or property, or theft of destruction of goods' that is 'directed on the high seas or in a place outside the jurisdiction of any

¹⁴⁰ Munsing and Lamb, *Joint Interagency Task Force-South*, 15.

¹⁴¹ Joe DiRenzo, "U.S. Coast Guard in Review," in *Proceedings* 143, no. 5 (May 2017): 79, ProQuest Document ID: 1907747448.

¹⁴² Joe DiRenzo, "U.S. Coast Guard in Review," in *Proceedings* 136, no. 5 (May 2010): 91, ProQuest Document ID: 205989199.

¹⁴³ James McLay and Hans Staffelbach, "Global Enforcers," in The Coast Guard Proceedings 69, no. 1 (Spring 2012), 51, http://www.dco.uscg.mil/Portals/9/DCO%20Documents/Proceedings%20Magazine/Archive/2012/Vol69 No1 Spr2012.pdf?ver=2017-05-31-120745-683.

¹⁴⁴ DiRenzo, "U.S. Coast Guard in Review," (May 2010): 91.

state.""¹⁴⁵ USCG LEDETs are essential to anti-piracy because of their law enforcement skills and expertise but are not necessary. International law identifies piracy as "an attack on the global community," and it suggests that all naval forces are empowered to prevent piracy. ¹⁴⁶ As such, the USN leads the anti-piracy efforts. But when prescribed, USCG LEDETs could enhance USN anti-piracy operations.

5. Best Practices

Much can be learned from these past USN and USCG joint maritime interdiction operations and can be harnessed to accelerate USN and USCG interoperability in new ways like with distributed maritime capabilities. First off, the USN and USCG formed a substantial measure of trust, which is foundational to the execution of operations. Second, the USN and USCG are better attuned to one another's capabilities and limitations, which could help bolster the means whereby the other lacks. The USN offers hardened naval power through its capable surveillance sensors and significant firepower, whereas the USCG presents maneuverability, specialized tactics, and legal authority. Moreover, overlapping capabilities increases the range of operations that the U.S. naval forces can engage within. Third, the USN and USCG demonstrated that they work efficiently under the same command network. A CNA report assessed USN and USCG interoperability from Operation Iraqi Freedom determining how it "fit well into the Navy's command and control structure." ¹⁴⁷ Lastly, the mix of USCG entities in a USN construct increases proportionality while deescalating tensions due to the USCG's "less threatening nature" 148 For example, Ostrom writes that an Iraqi sea captain said he failed to release mines into the sea because of the presence of USCG "white patrol boats." ¹⁴⁹ Collectively, U.S. naval leadership aims to prevent wars. A more proportional naval power presence could ease rising tensions and maintain a state of peace.

¹⁴⁵ Donna J. Nincic, "Sea Lane Security and U.S. Maritime Trade: Chokepoints as Scarce Resources," in *Globalization and Maritime Power*, ed. Sam J. Tangredi (Washington, DC: National Defense University Press, 2002), 159.

¹⁴⁶ Thachuk and Tangredi, "Transnational Threats and Maritime Responses," 70.

¹⁴⁷ Ostrom, The United States Coast Guard and National Defense, 149.

¹⁴⁸ Ibid., 147.

¹⁴⁹ Ibid., 142.

The USCG has shown that it is more than just a coast guard. In a time of need, the USCG delivered naval strength to intensify U.S. naval power and cast greater U.S. seapower upon the world. Trust, force familiarity, command integration, and proportionality demonstrated that as an integrated force, the USN and USCG achieved more significant and more flexible means to undertake new challenges. The USN and USCG managed to adapt with the changing threats, e.g., asymmetric threats: drug runners and pirates. The counter-piracy missions conducted off the coast of the Horn of Africa uses relatively similar operations and tactics as the earlier counter-drug missions in the Caribbean Sea. Now, the threats again continue to evolve in new ways. Competitions among world powers are growing, and tensions over contended territories are also increasing. Thus, there is a need to prevent major conflict between state powers. Research shows that joint USN and USCG operations were adequate to meet the needs and threats of past challenges and security interests. However, strong signals from senior U.S. leadership for innovated naval forces call for action to be taken. Through new lines of effort to contend with new and rising threats, increased USN-USCG interoperability in the form of distributed maritime capability could have a hand in positively shaping future relations.

III. USN-USCG INTEROPERABILITY, A CASE FOR THE SOUTH CHINA SEA

A. INTRODUCTION

Chapter II explained the U.S. Coast Guard's (USCG) significance as a maritime force and then examined traditional U.S. Navy (USN) and USCG interoperability operations to extrapolate potential advantages that the services could achieve through joint efforts generating greater naval power. Not only has the USCG historically proven its ability to fight alongside the other U.S. military services as an independent military branch, but it has also proven to be an effective and efficient fighting force in joint operations with the USN. Some best practices derived from last chapter's examination of USN and USCG interoperability are trust, force familiarity, command integration, and proportionality, all of which should be further crafted and harnessed toward the distributed maritime capability strategy to more effectively overcome existing and future maritime security concerns.

A central and growing U.S. security interest concern is regional security and economic stability in the South China Sea. China's current lack of compliance or reconciliation with the UNCLOS is associated with the growing instability in the South China Sea. China continues to economically, politically, and militarily pressure regional powers in the South China Sea over territorial and maritime claim disputes. China defends its historically disputed territory by claiming an outlined nine-dash line zone containing 90 percent of the South China Sea, which disregards multiple Southeastern Asian states' territories.¹⁵⁰

This case legitimately warrants U.S. concern because China is independently advancing military modernization endeavors. Accordingly, the 2015 U.S. *National Security Strategy* identified Asia as a region with "potential for energy-related".

¹⁵⁰ Ronald O'Rourke, Maritime Territorial Exclusive Economic Zone (EEZ) Disputes Involving China: Issues for Congress, CRS Report No. R42784 (Washington, DC: Congressional Research Service, 2017), 24.

conflict."¹⁵¹ Moreover, the *National Security Strategy* explicitly considered the South China Sea as one area of "tension" with "risks of escalation."¹⁵² As U.S. economic and security interests are linked to development in the Asia-Pacific region, the South China Sea disputes are prime considerations for USN–USCG interoperability because China's excessive maritime territorial claims also affect fishing resources. ¹⁵³ *A Cooperative Strategy for 21st Century Seapower* also emphasizes challenges in the Indo-Asia-Pacific region hampering U.S. economic and security interests, specifically. ¹⁵⁴ China's creeping intrusive expansion over the region and especially the South China Sea. ¹⁵⁵ In the South China Sea, China is exercising self-declared sovereignty over regions beyond those of their right. This requires urgent attention and response from the international community.

While involvement in the South China Sea is inherently necessary for the United States' prosperity, it is not without considerable challenges. Fundamentally speaking, the USN currently lacks the number of warships needed to adequately ensure security risks in regions like the South China Sea. The 2010 *Naval Operations Concept* called for sea control through various initiatives like a "large number of combat-ready platforms." However, it appears the USN is underperforming in ship-force readiness. The current ship force of 290 is not sufficient to meet current operational demands; a larger navy is needed. Released in December 2016, the latest USN Force Structure Assessment concludes that the USN technically requires a 653-ship force to support all ongoing operations, even though it also argues that a 355-ship force would suffice. Admiral

¹⁵¹ Obama, National Security Strategy, 19.

¹⁵² Ibid., 10.

¹⁵³ Obama, *Sustaining U.S. Global Leadership*, 2; Pitlo III, "Fishing Wars: Competition for South China Sea's Resources."

¹⁵⁴ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, A Cooperative Strategy for 21st Century Seapower, 3.

¹⁵⁵ Ibid., 3–4.

¹⁵⁶ U.S. Department of the Navy, Naval Operations Concept 2010,56.

¹⁵⁷ O'Rourke, Navy Force Structure and Shipbuilding Plans, 2.

¹⁵⁸ U.S. Navy, Executive Summary, 2016 Navy Force Structure Assessment, 2–3.

Richardson, the Chief of Naval Operations, echoes this need, stating, "The nation needs a more powerful Navy, on the order of 350 ships." ¹⁵⁹

The USN's willingness to settle at a 54 percent minimal ship-force solution to meet its operational demands combined with the fact that the USN's surface combatant fleet strength is estimated lower than China, is an alarming notion for the United States' future security. Even at the USN's reassessed goal of a 355-ship force, it sits at a 65-ship deficit. Jane's ship databases assessed that, while the United States' surface combatant fleet strength was at 108 ships, China's surface combatant navy consisted of 233 ships. The new and approved 355-U.S. ship force plan is not estimated to be realized at least until the fiscal year 2046. As a result, the USN's distributed lethality concept is a sound strategy to increase its offensive and defensive capabilities. The integration of USCG cutters among USN warships via distributed maritime capability would only optimize U.S. naval force capabilities further and more quickly, adding an already-ready fighting force.

Chapter III discusses the significance of the South China Sea as it pertains to the United States, including the risk of conflict escalation and the advantages to bolstering U.S. naval forces with the USCG, and outlines a potential solution to de-escalating South China Sea tensions by applying the distributed maritime capability strategy.

B. SOUTH CHINA SEA: U.S. INTERESTS AND CONCERNS

The United States has deeply rooted interests in the Asia-Pacific region, specifically the South China Sea and must continue to take necessary measures to secure U.S. interests in the region, including maintaining a naval power presence. Perceived as a threatening U.S. rival, China's actions in its rise in global power status suggest the potential for conflict erupting in the South China Sea as China proclaims sovereignty over internationally unaccepted territorial and maritime claims. Retired USN Admiral

¹⁵⁹ U.S. Department of the Navy, *The Future Navy*, 1.

^{160 &}quot;United States: Navy," Jane's by IHS Markit, October 26, 2017, https://janes.ihs.com/MilitarySecurityAssessments/Display/1766499; "China: Navy," Jane's IHS Markit, September 22, 2017, https://janes.ihs.com/MilitarySecurityAssessments/Display/1322663.

¹⁶¹ O'Rourke, Navy Force Structure and Shipbuilding Plans, 3.

James Stavridis, a professional mariner, defense strategist, and respected scholar, is just one voice amongst a larger consensus that has foreshadowed escalating U.S.—China conflict in the South China Sea, stating, "this situation will grow over the coming decades, and the potential for active combat is not insignificant." Economic, political, and security interests demand U.S. attention in the South China Sea to engage with, and if needed, safeguard against China. As U.S. and Chinese policies and interests progress in some paths of possible convergence, the intensification of USN—USCG operational efforts should be considered to deter aggression through building U.S.—China relations yet be able to shift and act with force if escalations would flare up to conflict.

The ongoing South China Sea disputes impact U.S. economic, political, and security interests. The leading crises throughout the South China Sea are the various disputes of sovereignty over maritime territorial disputes and China's interpretation of its own rights within the *exclusive economic zones* (EEZ), the maritime area 200 nautical miles from a coastal state's shore, within which states have sovereign rights "with respect to natural resources and certain economic activities, and exercise jurisdiction over marine science research and environmental protection." There are three South China Sea island group disputes: the Paracel Islands, "claimed by China and Vietnam and occupied by China;" the Spratly Islands, "claimed entirely by China, Taiwan, and Vietnam, and in part by the Philippines, Malaysia, and Brunei, and which are occupied in part by all these countries except Brunei;" and the Scarborough Shoal, "claimed by China, Taiwan, and the Philippines, and controlled since 2012 by China." Additionally, out of the 168 parties to UNCLOS, China, a ratified member, is one of 27 countries who fail to abide by UNCLOS governance that empowers a nation with the "right to regulate economic

¹⁶² James Stavridis, Sea Power: The History and Geopolitics of the World's Oceans (New York: Penguin, 2017), 189.

^{163 &}quot;United Nations Convention on the Law of the Sea of 10 December 1982: Overview and Full Text," United Nations: Oceans and Law of the Sea, last modified May 4, 2017, http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm.

¹⁶⁴ O'Rourke, Maritime Territorial Exclusive Economic Zone, 7.

activities" but not foreign military activities within their EEZ.¹⁶⁵ Convoluting this issue further is China's nine-dash line, which "extends up to 1,000 miles from Chinese mainland" and essentially encloses the majority of the South China Sea as China's territorial waters.¹⁶⁶

1. Economic

The South China Sea is economically vital to the United States and to the rest of the world because of the significant quantities of resources it contains. With an area over 1.3 million square miles, the South China Sea "accounts for more than 10 percent of global fisheries productions" and has an estimated capacity of "11 billion barrels and 190 trillion cubic feet of proved and probable oil and natural gas reserves." Furthermore, the international community is dependent on the South China Sea for trade. "An estimated \$3.4 trillion worth of international shipping trade passes through the SCS [South China Sea] each year." As a critical waterway in and out of the South China Sea, "35% of global seaborne petroleum travels through the Malacca Strait alone." Unique to the United States, "approximately \$1.2 trillion in ship-borne goods bound for the United States pass through the South China Sea each year." Aside from the goods and money gained, trade also influences regional stability by motivating and building rules-based partnerships. Rules-based partnerships "Motivates countries to seek peaceful resolutions to problems to maintain mutually beneficial trading relationships and

¹⁶⁵ United Nations: Office of the Legal Affairs, Division for Ocean Affairs and the Law of the Sea, "Status of the United Nations Convention on the Law of the Sea, of the Agreement Relating to the Implementation of Part XI of the Convention and of the Agreement for the Implementation of the Provisions of the Convention Relating to the Conservation and Management of Straddling Fish Stocks and High Migratory Fish Stocks," July 31, 2017, 9, http://www.un.org/depts/los/reference_files/status2010.pdf; O'Rourke, *Maritime Territorial Exclusive Economic Zone*, 9.

¹⁶⁶ Nincic, "Sea Lane Security and U.S. Maritime Trade," 155; O'Rourke, *Maritime Territorial Exclusive Economic Zone*, 9, 24.

¹⁶⁷ Sam Bateman, "Good Order at Sea in the South China Sea," in *Maritime Security in the South China Sea: Regional Implications and International Cooperation*, ed. Shicun Wu and Keyuan Zou (England: Ashgate Publishing Limited, 2009), 15; United States Department of Defense, *Asia-Pacific Maritime Security Strategy*, 5.

¹⁶⁸ O'Rourke, Maritime Territorial Exclusive Economic Zone, 2.

¹⁶⁹ Green et al., Countering Coercion in Maritime Asia, 15.

¹⁷⁰ Ibid., 15.

participation in a rules-based trade relationship binds governments to the rule of law."¹⁷¹ Therefore, ensuring Asia's compliance with rules is of great economic interest to the United States because it dissuades competition through conflict.¹⁷²

2. Political

In political terms, the United States is committed to encouraging peace and democracy, as well as forming good relations with South China Sea nation-states, which primarily are comprised of China and the ASEAN: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam. The 2015 National Security Strategy underscores U.S. values of "promoting universal values abroad" by "defending democracy and human rights" and "support[ing] peaceful democratic change."173 As such, the United States is invested in the success of Taiwan because it is a democratic Asian country, a defense partner, and a geostrategically important ally against a communistic China.¹⁷⁴ Author, John J. Tkacik Jr. describes Taiwan as "a poster child for democracy in Asia." 175 Furthermore, the United States is an advocate and encourager of peace accords to support a rules-based system and build trust amongst nations. There are many legal mechanisms in place to endorse peaceful conflict resolutions to South China Sea disputes that the United States supports and welcomes. Even though UNCLOS is most relevant, there are various other institutions in place to build trust for peaceful resolutions. Other U.S. endorsed agreements related to South China Sea disputes include the 1972 Convention on Preventing Collisions at Sea, the 2014 Code for Unplanned Encounters at Sea, the 2014 U.S. China Memorandum of Understanding on Air and

¹⁷¹ Dana R. Dillon, *The China Challenge: Standing Strong Against the Military, Economic, and Political Threats that Imperil America* (Lanham, MD: Rowman and Littlefield, 2007), 95.

¹⁷² Green et al., Countering Coercion in Maritime Asia, 15.

¹⁷³ Obama, National Security Strategy, 19.

¹⁷⁴ John J. Tkacik Jr, "One China, Two Chinas, One Taiwan?," in *The China Challenge: Standing Strong Against the Military, Economic, and Political Threats that Imperil America* (Lanham, MD: Rowman and Littlefield, 2007), 144.

¹⁷⁵ Ibid., 144.

Maritime Encounters, and the 2002 Negotiations on South China Sea Code of Conduct.¹⁷⁶

3. Security

From a multi-scalar security approach to the South China Sea, the United States upholds international laws and good order at sea, supports foreign country alliances, and preserves security to the homeland. Beginning from the broadest lens purview, the United States functions in the South China Sea with the objectives of preventing conflict and promoting peace worldwide. Despite the fact that the United States "takes no position on competing claims to sovereignty over disputed land features in the . . . SCS, the United States does have a position on how competing claims should be resolved: territorial disputes should be resolved peacefully, without coercion, intimidation, threats, or the use of force, and in a manner consistent with international law."177 To discourage China's aggression against territorial disputes and excessive maritime claims, the USN affirms international law via Freedom of Navigation Operations (FONOPs). FONOPs engages in "free passage in regions with unlawful maritime sovereignty claims" and involves "naval units transiting disputed areas to avoid setting the precedent that the international community has accepted these unlawful claims." The overall purpose is for states to "recognize the legal right for all to operate freely in international waters and respect the navigational provisions" of UNCLOS. 179 If China were to gain sovereignty over excessive claims, this change could set a new international precedent, inspiring similar action by other nations such as Iran potentially seizing control of the Strait of Hormuz linking the Arabian Sea to the Arabian Gulf.

Narrowing the scope to specific U.S. security interests in the South China Sea region, the United States is committed to the Philippines via the U.S.—Philippines Mutual Defense Treaty. The treaty "recognizes that an armed attack in the Pacific Area on either

¹⁷⁶ O'Rourke, Maritime Territorial Exclusive Economic Zone, 14–17.

¹⁷⁷ Ibid., 35–36.

¹⁷⁸ Ibid., 37.

¹⁷⁹ Nincic, "Sea Lane Security and U.S. Maritime Trade," 157.

of the Parties would be dangerous to its peace and safety and declares that it would act to meet the common dangers following its constitutional processes." ¹⁸⁰ Therefore, an attack on either ally is an attack on both parties, and the afflicted party could receive military support from the other ally. Subsequently, if China and the Philippines engage in a serious altercation, the United States would be obligated into the conflict. Such a scenario is highly plausible as indicated by recent studies. The Center for Strategic and International Studies' (CSIS) China Power Project analyzed six separate South China Sea incidents between China and the Philippines in 2016 and at least one incident so far in 2017. ¹⁸¹ An alleged Chinese Coast Guard (CCG) vessel was reported to have opened fire on a Filipino fishing vessel near the Union Banks in the Spratly Islands. ¹⁸² As a result, the United States has even more critical and timely vested interests to retain cordialness and security in the region.

Finally, from a self-sufficient U.S. security interest frame of reference, operations in the South China Sea are inherent for self-defense. Utilizing U.S. naval forces, the United States seeks sea control in the South China Sea for deterrence and power projection purposes. FONOPs and MIO are two missions in the South China Sea that enable the U.S. to achieve strategic positions for deterrence and power projection. Reading between the lines, U.S. naval force presence in an adversary's backyard motivates an adversary to think twice before resorting to military engagement and reduces the risk of conflict. Nevertheless, as conveyed from the 2015 *Cooperative Strategy for 21st Century Seapower*, if conflict would break out, the U.S. is ready to respond immediately because assets are already positioned to react. 183 U.S. naval forces operate within a layered expansive depth framework for the defense of the homeland.

¹⁸⁰ Walter Lohman, "Scarborough Shoal and Safeguarding American Interests," *The Heritage Foundation*, no. 3603 (May 2012), 2, http://thf_media.s3.amazonaws.com/2012/pdf/ib3603.pdf.

¹⁸¹ China Power Team, "Are Maritime Law Enforcement Forces Destabilizing Asia?," CSIS: China Power Project, last modified November 7, 2017, https://chinapower.csis.org/maritime-forces-destabilizing-asia/.

¹⁸² China Power Team, "Are Maritime Law Enforcement Forces Destabilizing Asia?"

¹⁸³ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, A Cooperative Strategy for 21st Century Seapower, 22.

4. The Rising Hegemon

China's rise in power combined with its national aspirations, strengthened military capabilities and continuing regional disputes distinguish the nation as a compelling threat to the United States, U.S. allies, and other Pacific region nations. China's considerable growth as a nation is due to its progressive economy, which is only projected to increase. The CSIS claims that today the United States and China are considered the world's two largest economies, and sees China as "becoming the world's biggest economy by 2024."184 The rise of China's economy paid the way for their military modernization, particularly for their naval forces to be able to project power in the South China Sea. A 2015 ONI report assessed that the growth of China's economy resulted in a 10% defense budget increase to \$141.5 billion. 185 China is driven to control the South China Sea for a variety of reasons. Beyond just the economic benefits of controlling critical trade routes and resources like fish and hydrocarbons, analysts also assess that China is culturally motivated by feelings of nationalism and historical entitlements.¹⁸⁶ Author James R. Holmes argued that China seeks to "banish China's 'century of humiliation' at the hands of seaborne invaders." For security purposes, the South China Sea, delineated by the nine-dash line, offers a layer of defense as the firstisland China to serve as a buffer zone to mainland China. 188 Moreover, it forms a bastion—"a defended operating sanctuary"—for Chinese naval forces and "guarantees strategic access to open waters of the Indian and Pacific Oceans." 189 Ultimately, China's economic and security interests paved the way "to help achieve a broader goal of

¹⁸⁴ He Fan and Y Qianlin, "World Economic Order: Present and Future," in *Parallel Perspectives on the Global Economic Order: A U.S.-China Essay Collection*, ed. Daniel Remler and Ye Yu (Washington, DC: CSIS, 2017), 11, https://csisprod.s3.amazonaws.com/s3fspublic/publication/170922_Remler_ParallelPerspectives_Web.pdf?JUYh7r7rMJGc0rv1bx8yGdHmi3B67TKk.

¹⁸⁵ U.S. Department of Defense, *PLA Navy*, 47.

¹⁸⁶ O'Rourke, Maritime Territorial Exclusive Economic Zone, 2.

¹⁸⁷ James R. Holmes "The State of the U.S.-China Competition," in *Competitive Strategies for the 21st Century: Theory, History, and Practice*, ed. Thomas G. Mahnken (Stanford: Stanford University Press, 2012), 139.

¹⁸⁸ O'Rourke, Maritime Territorial Exclusive Economic Zone, 3.

¹⁸⁹ Ibid., 3.

becoming a regional hegemon."¹⁹⁰ China is a risk to the South China Sea's regional security and economic stability.

C. CONDITIONS FOR CONFLICT ESCALATION IN THE SOUTH CHINA SEA

China's methods and approaches leveraging military strategies and concepts to achieve regional dominance repudiated international laws, norms, and interests—especially U.S. interests—placing it on a sure-fire path toward strife with the United States. A 2017 U.S. DOD report assessing China's military power realized changes in naval doctrine that forewarn of the need for revamped naval power in the South China Sea. China's military doctrine, *Science of Strategy*, advocates for the need for emphasis in the maritime domain and additional military capabilities to secure China's growing interests overseas. ¹⁹¹ To ensure these interests, China is developing naval sea control capabilities for its near seas defense and far seas protection through an active defense strategy., ¹⁹² China's navy will not initiate attacks, but will respond if attacked. ¹⁹³ Moreover, the active defense strategy focuses on counterattacks "to disrupt an adversary's offensive operations or simply its preparation" to de-escalate and seize the situation. ¹⁹⁴

China's military concepts may sound like respectable defensive strategies, but they are provocative because of the context of the South China Sea's circumstances and China's coercive nature. Counter strategies are warranted to hold China accountable and contend against domineering and escalatory, yet passive strategies. There is a number of significant supporting evidence suggesting that China escalates maritime incidents rather than de-escalating maritime activities in the South China Sea.

¹⁹⁰ O'Rourke, Maritime Territorial Exclusive Economic Zone, 3.

¹⁹¹ U.S. Department of Defense, Annual Report to Congress, 3.

¹⁹² Ibid., 24, 39.

¹⁹³ Ibid., 39–40.

¹⁹⁴ Ibid., 40.

1. The Rejection of UNCLOS

China rejected the 2016 UNCLOS Tribunal ruling over maritime claims pertaining to the Spratly Islands between China and the Philippines.¹⁹⁵ The ruling invalidated China's entitlements to several Spratly Island maritime claims as well as the maritime territory contained within the historic nine-dash line claim.¹⁹⁶ However, China persists in enforcing its alleged claims and ignores the international laws that impact their interests. As recently as in August 2017, China warned the United States after the USS *JOHN S. MCCAIN* intentionally sailed near the Paracel Islands, which are excessive maritime territories China proclaimed sovereignty over, located within China's so-called nine-dash line; both claims are not internationally recognized.¹⁹⁷ Senior Colonel Wu Qian, one of China's Ministry of Foreign Affairs and Ministry of National Defense spokesmen, stated in response to the USN's operations, "The American military provocation will only induce Chinese military to further build up various defensive capacities." Official remarks reinforced its dubious stance toward UNCLOS.

2. Coercive Behavior

China has displayed overt aggression at sea, which has incited regional conflict. In the past, China's maritime and air forces have operated in extremis behaviors toward both ASEAN and U.S. vessels and aircrafts operating in China's excessive maritime claims. Dating as far back as May 15, 2010, China coerced Indonesia over fishing activities near the Natuna Islands inside Indonesia's EEZ; the Indonesian Ministry of Maritime Affairs and Fisheries seized two Chinese fishing vessels, but they were released after a Chinese maritime law enforcement vessel arrived on scene and threatened the use of force. 199 In a more recently reported incident on June 18, 2017, two Chinese Coast Guard (CCG) vessels harassed and allegedly damaged a Vietnamese fishing boat that was

¹⁹⁵ O'Rourke, Maritime Territorial Exclusive Economic Zone, 21.

¹⁹⁶ Ibid., 21.

¹⁹⁷ Chris Buckley, "Beijing Warns U.S Over Navy Patrol in South China Sea," *The New York Times*, August 11, 2017, https://www.nytimes.com/2017/08/11/world/asia/south-china-sea-trump-navy-patrol.html.

¹⁹⁸ Ibid..

¹⁹⁹ China Power Team, "Are Maritime Law Enforcement Forces Destabilizing Asia?"

operating near the Crescent Group of the Paracel Islands.²⁰⁰ Concerning China's threatening behavior toward the United States, incidents date back to March 2001, at which point the USNS *BOWDITCH* conducted ocean survey and surveillance operations within China's EEZ and was confronted and harassed by Chinese ships.²⁰¹ Two more notable incidents were between a USN EP-3 electronic surveillance aircraft in 2001 and the USNS *IMPECCABLE* in 2009. On April 1, 2001, a Chinese fighter aircraft collided with a USN EP-3 in international airspace over the South China Sea, which forced the EP-3 into an emergency landing onto Chinese territory, Hainan Island.²⁰² On March 8, 2009, a group of Chinese vessels composed of PLAN, maritime law enforcement, and fishing vessels harassed the USNS *IMPECCABLE* within dangerous proximity (25 feet) while in international waters South of China's Hainan Province until it was forced to depart the area.²⁰³ A more current account occurred on May 17, 2016, when Chinese fighter aircrafts again flew dangerously close to USN EP-3 aircraft while in international airspace closing within 50 feet of the U.S. EP-3.²⁰⁴ Although operating under UNCLOS, China acted as an antagonist.

3. Militarization of the South China Sea

Even though China denied South China Sea militarization accusations, evidence shows that China in fact expanded regional land features using dredging ships and then fortified the artificially enlarged land territories. Yao Wen, China's Foreign Ministry Deputy Director General for Policy Planning of the Department of Asian Affairs, was quoted by *The Manilla Times* on October 17, 2017, stating, "China will never seek militarization of the South China Sea." Moreover, the *NavyTimes* also claims that "China contends the man-made islands are primarily for civilian purposes and to increase

²⁰⁰ China Power Team, "Are Maritime Law Enforcement Forces Destabilizing Asia?"

²⁰¹ O'Rourke, *Maritime Territorial Exclusive Economic Zone*, 10.

²⁰² Ibid., 10.

²⁰³ Green et al., Countering Coercion in Maritime Asia, 52, 56.

²⁰⁴ O'Rourke, Maritime Territorial Exclusive Economic Zone, 11.

²⁰⁵ Jefferson Antiporda, "China Will Not Seek Sea Militarization," *The Manilla Times*, October 17, 2017, http://www.manilatimes.net/china-will-not-seek-sea-militarization/356979/.

safety for ships."206 However, China's actions contradict their spoken words. China started a land-reclamation process in December 2013 to develop and fortify maritime territories mainly upon the Spratly Islands in the South China Sea.²⁰⁷ U.S. DOD analysts suspected that China's build-up of Spratly Islands was to improve control within the South China Sea through an increased military presence.²⁰⁸ In 2016, China stopped artificially building-up seven Spratly Island maritime features, but the construction resulted in the addition of 3,200 acres of land with aircraft runways and port facilities including water and fuel storage centers.²⁰⁹ Furthermore, analysts identified that China constructed "24 fighter-sized hangars, fixed-weapons positions, barracks, administration buildings, and communication facilities at each of the three outposts": Fiery Cross, Subi, and Mischief Reefs.²¹⁰ A recent news article also suggested China's militarization efforts in the South China Sea are not complete. BBC reported on November 6, 2017 that China unveiled its newest and most powerful dredging ship, the Tian Kun Hao, suspected for operating near the Scarborough Shoal off the coast of the Philippines.²¹¹ The militarization of the region enables China to sustain greater flexibility and responsiveness to enforce their South China Sea interests.

4. Lack of ASEAN Might

China's ASEAN neighbors are not resourced and equipped well enough to formally contend with China's powerful naval forces in the South China Sea. The ASEAN's lack of security strength seemingly impedes their ability to thrive in the region. As a result, members of the ASEAN have looked to the United States, especially its naval power, to help bring stability to the South China Sea. China possesses the largest navy in

²⁰⁶ Christopher Bodeen, "Beijing Protests U.S. Navy Patrol through South China Sea," *NavyTimes*, May 25, 2017, https://www.navytimes.com/news/your-navy/2017/05/25/beijing-protests-us-navy-patrol-through-south-china-sea/.

²⁰⁷ O'Rourke, Maritime Territorial Exclusive Economic Zone, 32.

²⁰⁸ U.S. Department of Defense, *Annual Report to Congress*, 12.

²⁰⁹ Ibid., 12.

²¹⁰ Ibid., 12.

²¹¹ "What is China's 'Magic Island-Making' Ship?," BBC News, November 6, 2017, http://www.bbc.com/news/world-asia-china-41882081.

Asia; they have also contrived the largest coast guard force in the world. A 2015 Office of Naval Intelligence assessment on China's naval forces estimated that the CCG has 95 large vessels (greater than 1000 tons) and 110 small vessels (between 500 and 1000 tons) totaling to 205 CCG vessels for operational use. An updated 2017 DOD report on China's military power assessed China to possess over 130 large vessels, positioning the CCG at over 240 large vessels. The CCG has an extensive range of capabilities for a coast guard force. Some CCG vessels boast helicopter capabilities, guns sized between 30 and 70mm, and are built capable for distant out-of-area operations. The 2015 ONI assessment reported that the CCG is favored for enforcing China's maritime claims, and thus, have reduced the PLAN's role in "coastal patrols, law enforcement, EEZ enforcement, and territorial claim issues," which is used as an indirect presence if the CCG were to require any forceful backup.

In addition to China's CCG, the U.S. DOD *China Military Power* report also assessed that China's maritime paramilitary force, the China Maritime Militia (CMM), is an additional civilian-based armed naval reserve force, which supports the PLAN and CCG in "coercive activities to achieve China's political goals without fighting." Scholar, Andrew Erickson argued several incidents within the South China Sea in which the CMM were deployed to advance China's interests and excessive maritime claims. Erickson described the CMM blue hulled vessels as the "world's largest fishing fleet" that "double as support to the People's Liberation Army (PLA) when called upon to do so," which are "state-organized, -developed, and -controlled forces operating under a direct military chain of command" and in popular dispute incidents such as China's "1974 seizure of western Paracels from Vietnam, 2009 harassment of a U.S. Navy (USN) survey ship [USNS *IMPECCABLE*], 2011 sabotage of two Vietnamese hydrographic vessels, 2012 seizure of Scarborough Shoal from the Philippines, and 2014 repulsion of

²¹² U.S. Department of Defense, *Annual Report to Congress*, 24, 56.

²¹³ U.S. Department of Defense, *PLA Navy*, 45.

²¹⁴ U.S. Department of Defense, *Annual Report to Congress*, 56.

²¹⁵ Ibid., 56.

²¹⁶ U.S. Department of Defense, *PLA Navy*, 45–46.

²¹⁷ U.S. Department of Defense, Annual Report to Congress, 56.

Vietnamese vessels from disputed waters surrounding its oil rig, including by ramming and sinking them."²¹⁸ A more recent incident was when the CMM harassed and dangerously maneuvered across the bow of the USS *LASSEN* (DDG 82) operating near the Subi Reef.²¹⁹ The CMM naval forces give China a means to pursue its illegal excessive maritime claims.²²⁰ It projects fear through coercive actions to achieve its excessive claims in a regional peacetime setting. Defined as gray zone operations, these operations are termed "war without gun smoke" to "win without fighting [killing]."²²¹

The Philippines, a historical U.S. ally, conveyed a sense of futility to the idea of officially defying China and its superior military over excessive maritime claims. Philippine President Rodrigo Duterte spoke at a speech celebrating the 67th anniversary of the Philippine Marine Corps in November 2017 about upcoming bilateral negotiations with China which would include discussions over the South China Sea maritime territorial claim disputes. President Duterte advocates the Philippines' maritime claims expressing, "I will assert something and that is our inherent right to one day really put a stake to what we think is ours." News reporter, Dharel Placido extrapolates upon Duterte's comments: "In defending his move to seek better ties with Beijing, Duterte said Manila cannot afford to go to war with Beijing, which spends an enormous amount for its military." Additionally, President Duterte currently serves as the 2017 Chair of ASEAN. Even from this position of leadership guiding ten nations, he does not seem to feel that even as a united force, they would stand to be superior to China. The numbers also speak for themselves. The PLAN surface combatants comprised of destroyers, frigates, corvettes, and patrol vessels totaled to an estimated 234, whereas the ASEAN

²¹⁸ Erickson, "The South China Sea's Third Force," 1–3.

²¹⁹ Ibid., 4.

²²⁰ Ibid., 1–3.

²²¹ Ibid., 1–3.

Dharel Placido, "Duterte on West PH Sea: I'll Be Frank with China," ABS CBN News, November 7, 2017, http://news.abs-cbn.com/news/11/07/17/duterte-on-west-ph-sea-ill-be-frank-with-china.

²²³ Ibid.

surface combatants ranging from frigates and fast attack crafts summed to 204 vessels.²²⁴ Individually, the ASEAN members do not possess the naval power to engage China, let alone withstand China's counterattack and counterattack themselves.

D. BOLSTERING THE USN BY BRINGING IN THE USCG TO DE-ESCALATE THE ASIA-PACIFIC REGION

The United States recognizes that the South China Sea is a hotspot for conflict because of China's coercive behavior over its excessive maritime claims, but the USCG could be the ideal naval force to respond in certain circumstances. The United States also recognizes that it currently faces a shortage of USN surface combatants, which constrains its ability to provide preservations over U.S. interests in the South China Sea. Distributed maritime capability is a more timely strategy than waiting out decades for the USN's 355-ship goal to bolster USN–USCG interoperability and counter China's regional contentions. Moreover, it would safeguard U.S. interests in the region.

1. A Proportional Force In Partnership

Deploying USCG patrols into the South China Sea could ease pressures with China because the USCG's white hulled cutters are more proportional and, therefore, less provocative for confronting China's CCG and CMM fleets as compared to the USCG's relatively bigger and gray-hulled sister military branch, the USN. James D. Llewelyn termed the concept "white hull diplomacy," which could apply to the USCG in the South China Sea.²²⁵ Based off a coast guard vessel's renowned white hull, it symbolizes a

^{224 &}quot;China: Navy," Jane's by IHS Markit, September 22, 2017, https://janes.ihs.com/WorldNavies/Display/1322663; "Thailand: Navy," Jane's by IHS Markit, April 13, 2017, https://janes.ihs.com/WorldNavies/Display/1322776; "Vietnam: Navy," Jane's by IHS Markit, Sept 19, 2017, https://janes.ihs.com/WorldNavies/Display/1322790; "Indonesia: Navy," Jane's by IHS Markit, March 29, 2017, https://janes.ihs.com/WorldNavies/Display/1322697; "Malaysia: Navy," Jane's by IHS Markit, September 6, 2017, https://janes.ihs.com/WorldNavies/Display/1322724; "Philippines: Navy," Jane's by IHS Markit, September 1, 2017, https://janes.ihs.com/WorldNavies/Display/1322748; "Singapore: Navy," Jane's by IHS Markit, October 30, 2017, https://janes.ihs.com/WorldNavies/Display/1322761; "Cambodia: Navy," Jane's by IHS Markit, April 7, 2017, https://janes.ihs.com/WorldNavies/Display/1322652; "Laos: Navy," Jane's by IHS Markit, July 12, 2017, https://janes.ihs.com/WorldNavies/Display/1322712; "Brunei: Navy," Jane's by IHS Markit, March 20, 2017, https://janes.ihs.com/WorldNavies/Display/1322648.

²²⁵ Llewelyn, "Preventive Diplomacy," 50.

positive presence at sea; it's a sea-going haven to aid and protect others facing perils at sea by responding to search and rescue needs, maritime pollution incidents, and humanitarian and disaster assistance operations.²²⁶ White hull diplomacy is a collective multinational initiative to face "common non-traditional security challenges that reduce good order at sea, such as piracy, smuggling, violence at sea and maritime terrorism," and "also acts as a confidence-building measure between governments through regularized interaction in a security environment generally perceived as 'low politics' (i.e., non-threatening to the state actors involved)."²²⁷ As a result, the sense of cordialness projected from white hulled coast guard vessels is an internationally recognized symbol.

One mission of white hull diplomacy involving the United States and China is fishing enforcement. One way in which the United States and China could cooperate is through the affirming the December 20, 1991 United Nations General Assembly Resolution 46/215. This resolution expresses "concern over large-scale pelagic drift-net fishing and its impact on the living marine resources of the world's oceans and seas, including enclosed and semi-enclosed seas," and it calls upon the international community for support in enforcing and reducing illegal fishing practices.²²⁸ The United States and China enacted a bilateral Memorandum of Understanding (MOU) on the basis of high seas driftnet fisheries enforcement and the 1991 UN General Assembly Resolution on large-scale drift-net fishing. The regulation of high seas driftnets ensures they are a length of no greater than 2.5 kilometers.²²⁹ The *Memorandum of* Understanding (MOU) Between the Government of the United States of America and the Government of the People's Republic of China on Effective Cooperation and Implementation of United Nations General Assembly Resolution 46/215 of December 20, 1991. The MOU acts as an opportunity to increase partnerships with the United States and China while working for a higher, global purpose—patrolling the North Pacific

²²⁶ Llewelyn, "Preventive Diplomacy," 50.

²²⁷ Ibid., 50.

²²⁸ A/RES/46/215, United Nations (1991), http://www.un.org/documents/ga/res/46/a46r215.htm.

²²⁹ Poling et al., *Illegal*, *Unreported*, and *Unregulated Fishing*, 5.

Ocean for illegal high seas driftnet fishing.²³⁰ The MOU also "enable[s] China to more effectively enforce its domestic laws that prohibit driftnet fishing by Chinese-flagged vessels in the North Pacific."²³¹

Recent activities executed under the above MOU resulted in joint U.S.-China operations in the North Pacific Ocean in 2015 whereby six CCG Fisheries Law Enforcement Division Officers embarked onboard the USCGC *MELLON* to patrol the area for high seas driftnets.²³² Although no illegal fishing activities were found, 500 fishing vessels were sighted; the patrol amounted to over 100 ship days and 400 flight hours.²³³

A U.S.–Chinese fishing enforcement partnership proved to build mutual respect and open communications between the two coast guard forces, which could make South China Sea confrontations less volatile and better approachable for bilateral solutions. A number of United States-Chinese coast guard partnership-building events and exchange programs evolved over fishing enforcement. Chinese fisheries enforcement officers studied at the U.S. Coast Guard Academy and the fisheries enforcement school located in Kodiak, Alaska.²³⁴ In July 2012, the USCGC *RUSH* unified USCG and Chinese Fisheries Law Enforcement authorities who boarded and seized a Chinese high-seas drift net fishing vessel in the North Pacific Ocean, which was turned over to the Chinese Fisheries Law Enforcement Command.²³⁵

²³⁰ Lauren G. Fields, "International Agreements Concerning Living Marine Resources of Interest to NOAA Fisheries," U.S. Department of Commerce: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of International Affairs and Seafood Inspection, (Silver Spring: DOC, 2016), 136, http://www.nmfs.noaa.gov/ia/resources/publications/2016_international_agreements.pdf.

²³¹ Ibid., 136.

²³² Ibid., 136–137.

²³³ Ibid., 59.

²³⁴ Erickson, "Maritime Security Cooperation in the South China Sea Region," 15; U.S. Department of Defense, *Annual Report to Congress*, 77.

²³⁵ Michael Arguelles, "The North Pacific Coast Guard Forum," *The Coast Guard Proceedings of the Marine Safety and Security Council* 71, no. 1 (Spring 2014), 29, http://www.dco.uscg.mil/Portals/9/DCO%20Documents/Proceedings%20Magazine/Archive/2014/Vol71_No1_Spr2014.pdf?ver=2017-05-31-120836-853.

During a 2014 and 2015 U.S.—China Strategic and Economic Dialogue, a fisheries bilateral agreement between the United States and China was formed. This agreement set up meetings to "provide an opportunity for the United States and China to interact on fisheries specific issues both complementary to existing dialogues but also independent of them. And to discuss issues on a technical basis that might not always be appropriate for general US-China engagements." The agreement also led to additional meetings between the nations, such as a recent engagement held in Ningbo, China on April 13–14, 2016, to expand at-sea partnerships. The series of U.S.—Chinese coast guard engagements offer precedence for future USCG-CCG cordial relationships in the South China Sea.

2. A Proportional Force as a Coast Guard Force

While some U.S.—Chinese partnerships like fisheries enforcement are positive and continue to grow cooperative engagements, it does not escape the fact that U.S.—Chinese relations in other circumstances are tense in the South China Sea. Explicitly concerning is China's direct and continued violation of international laws and norms as ruled by The Hague in 2016.²³⁸ Therefore, the U.S.—Chinese relationship is still tense, and the United States must continue to represent a show of force in the region. Distributed maritime capability would enable increased U.S. white-hull to Chinese white-hull interaction to avoid escalation of force from gray-hulled warships. However, it would also still retain USN oversight for forceful backup.

Military capabilities and China's historical responses to conflict could support the idea that the USCG could prevent escalations from rising to full out military conflicts. The USCG armament of crew-served .50-caliber machine guns to larger gun mounts like the Mk. 110 57mm gun is comparable to the CCG and CMM, equipped with guns

²³⁶ Fields, "International Agreements Concerning Living Marine Resources of Interest to NOAA Fisheries," 138.

²³⁷ Ibid., 138.

²³⁸ The Republic of the Philippines v. The People's Republic of China, Press Release (Permanent Court of Arbitration, 2016), 5, 10, https://pca-cpa.org/wp-content/uploads/sites/175/2016/07/PH-CN-20160712-Press-Release-No-11-English.pdf.

ranging from 12.7mm to 76mm.²³⁹ Aside from weaponry, the USCG is a proportional force to engage Chinese naval vessels in the South China Sea because China's Coast Guard, the CCG, is more likely to respond to or initiate incidents in the region than the PLAN. The CSIS China Power Project compiled data starting from 2010 to present day, which depicts incidents at sea amongst ASEAN members focused in the South China Sea; out of the 49 total incidents at sea 44 of the incidents involve China in some capacity.²⁴⁰ Out of all the Chinese-related incidents, 86 percent (38 incidents) involved the CCG or some Chinese maritime authority.²⁴¹ Whereas, only 18 percent (eight incidents) of the Chinese incidents involved the PLAN, and of those cases, four of which were solely PLAN-related.²⁴²

China is also more likely to react to USN forces with PLAN forces. On December 5, 2013, a PLAN vessel maneuvered into a path of collision with the USS *COWPENS* (CG 63) that was operating within China's EEZ and approximately 30 miles away from China's aircraft carrier. The broad use of CCG white hulled vessels should be matched by the use of USCG ships as an opportunity to settle disputes at the lowest level of force possible.

3. An Operationally Practical Option

The USCG cutter force is highly maneuverable and, therefore, suitable to the South China Sea's bathymetry. USN Rear Admiral John Neagley, a former commanding officer of the USS *FITZGERALD* (DDG-62) who operated in the Arabian Gulf during Operation Iraqi Freedom in 2003 endorses the use of the USN's (Littoral Combat Ship) LCS platform out of Singapore in the Southeast Asian operating area because of its 15-foot shallow draft allowing for increased flexibility.²⁴³ Compared to large USN surface

²³⁹ U.S. Department of Defense, *PLA Navy*, 46; U.S. Department of Defense, *Annual Report to Congress*, 56.

²⁴⁰ China Power Team, "Are Maritime Law Enforcement Forces Destabilizing Asia?"

²⁴¹ Ibid.

²⁴² Ibid.

²⁴³ Megan Eckstein. "Interview: Plans for 2 Littoral Combat Ships in Singapore, 1 in Bahrain in 2018 Shaped by Lessons Learned," *USNI News*, June 7, 2017, https://news.usni.org/2017/06/07/interview-plansfor-2-littoral-combat-ships-in-singapore-1-in-bahrain-in-2018-shaped-by-lessons-learned.

combatants with drafts at over 30 feet, large USCG cutters are better adapted for the littorals because their drafts range between nine and twenty-three feet.²⁴⁴ Rear Admiral Neagley reflects: "Having a shallow-draft ship to operate up in the Persian Gulf and some of those areas is a big asset. I had a DDG, and every time I went up north and had to operate around the oil wells up there, you had to be on your toes and watch the draft of that ship." Rear Admiral Neagley further discusses the benefit of having a shallower draft vessel like the LCS in the Pacific stating,

For that part of the world they're a really good size ship to operate with our partners out there. The ability to kind of engage with Brunei and the other countries in that particular area with that size of ship, and to be able to go into ports that we haven't really been able to go into before because we have a relatively shallow draft, we're talking about a 15-foot draft—has opened up some things for us.²⁴⁵

The addition of USCG cutters forward stationed at Singapore would complement the LCS fleet because it provides greater U.S. naval strength and presence in the littorals.

Another reason why the USCG is appropriate for South China Sea operations is that cutters are also logistically capable within the region. While the USCG cutters' lack the endurance of large surface combatants on open oceans, the National Security Cutter and Offshore Patrol Cutter would be an ideal platform for the South China Sea area. Spanning over the majority of the South China Sea, the approximate distance between Singapore and Taiwan ports is just over 1,600 nautical miles—a four and half day transit at 15 knots cruising speed.²⁴⁶ The National Security Cutter has a range of 12,000 nautical miles with a patrol endurance between 60 and 90 days; the Offshore Patrol Cutter has a

^{244 &}quot;U.S. Navy Destroyer (Ship Class—DDG)," U.S. Department of the Navy: Commander, Naval Surface Force, U.S. Pacific Fleet, accessed November 14, 2017, http://www.public.navy.mil/surfor/Pages/Destroyer.aspx#.Wgd2xUyZPxQ; "USS PRINCETON (CG-59): Guided Missile Cruiser," Naval Vessel Register, last modified March 6, 2012, http://www.nvr.navy.mil/SHIPDETAILS/SHIPSDETAIL_CG_59_5121.HTML; "National Security Cutter," United States Coast Guard Acquisition Directorate, April 2017, http://www.dcms.uscg.mil/Portals/10/CG-9/Acquisition% 20PDFs/Factsheets/NSC.pdf?ver=2017-04-24-142526-023; "Offshore Patrol Cutter," United States Coast Guard Acquisition Directorate, March 2017, http://www.dcms.uscg.mil/Portals/10/CG-9/Acquisition% 20PDFs/Factsheets/OPC.pdf?ver=2017-04-24-145309-917; "Fast Response Cutter," United States Coast Guard Acquisition Directorate, November 2017, http://www.dcms.uscg.mil/Portals/10/CG9/Acquisition% 20PDFs/Factsheets/FRC.pdf?ver=2017-07-06-143214-323.

²⁴⁵ Eckstein, "Interview: Plans for 2 Littoral Combat Ships in Singapore."

²⁴⁶ Sea-Distances.org, accessed November 14, 2017, https://sea-distances.org.

range of 10,200 nautical miles with an endurance of 60 days; the Fast Response Cutter, a lesser capable cutter, has a range of 2,500 nautical miles and an endurance of five days.²⁴⁷

4. Increasing USCG Presence

Elevating the USCG footprint in the South China Sea is a practical step toward relieving regional tensions and maximizing USN–USCG interoperability, which also preserves U.S. interests. Although the United States lost a major South China Sea security mechanism when significant U.S. military forces were evicted from the Philippines' Clark Air Force Base and Subic Bay Naval Base in the early 1990s, both the USN and USCG still maintain a small foothold via Singapore. The United States does not maintain a military base per se, but it holds an agreement allowing U.S. naval and air forces to access and use the limited Singapore Ministry of Defense facilities. The Navy Region Center Singapore was established to coordinate, manage, and support various military activities such as USN Commander, Destroyer Squadron Seven, and the U.S. Coast Guard Detachment Singapore. The USCG detachment in Singapore is an extension of the USCG Far East Activities in Japan, and it is responsible for marine inspections and acts as a liaison to international port securities. Additionally, the USN forward stationed three LCSs to Singapore over the past three years with the intention to assign two more LCSs in 2018. The recent build-up of an LCS squadron in Singapore

²⁴⁷ "National Security Cutter;" "Offshore Patrol Cutter;" "Fast Response Cutter."

²⁴⁸ Bill Hayton, *The South China Sea: The Struggle for Power in Asia* (New Haven, CT: Yale University Press, 2014), 84.

²⁴⁹ "Welcome to Singapore: Your Guide to an Easier PCS Move Abroad," Navy Region Singapore, accessed November 14, 2017, 3, http://www.clwp.navy.mil/Portals/13/WelcomeAboard.pdf?ver=2016-06-17-040030-077.

²⁵⁰ Ibid., 3.

^{251 &}quot;U.S. Coast Guard Det Singapore," CNIC Singapore Area Coordinator, accessed November 14, 2017, https://cnic.navy.mil/regions/sac/about/tenant_commands/us_coast_guard_det_singapore.html; "Welcome to Far East (FEACT)," U.S. Department of Homeland and Security: United States Coast Guard, accessed November 14, 2017, http://www.pacificarea.uscg.mil/Our-Organization/District-14/D14-Units/Activities-Far-East-FEACT/.

²⁵² Eckstein, "Interview: Plans for 2 Littoral Combat Ships in Singapore;" "USS Freedom Arrives in Singapore," U.S. Department of the Navy: Commander, Logistics Group, Western Pacific Public Affairs, April 17, 2013, http://www.navy.mil/submit/display.asp?story_id=73441.

provides precedence to make room to berth new USCG cutters at Navy Region Center Singapore to serve in South China Sea operations.

E. FISHING FOR A SOLUTION

While revamping naval power in the South China Sea with increasing USN-USCG interoperability in the region offers a promising outlook, the question of how remains. How can the United States bolster its naval forces in the South China Sea to better ensure regional security interests without further escalating tensions to conflict with China? A possible solution is to apply distributed maritime capability to fisheries enforcement. The United States Government should actively attain fishing enforcement partnerships ideally with China and other ASEAN members to empower the USCG authority in the South China Sea. However, if China were to reject an increased U.S. fishery enforcement partnership, then the United States should still pursue the other Southeastern Asian Nations so that legal authority could partially reign over China's naval forces. As the U.S. fisheries enforcement mission expands, the USN and USCG could align to strengthen the fisheries security operations, increase U.S. presence in the region, and ultimately, promote regional security and economic stability while also decreasing risks of conflict in the South China Sea.

1. Linking the Chinese Maritime Militia (CMM) To Illegal Fishing

International assistance has been necessary to begin to address the CMM's belligerent and illegal activities. As previously discussed, because China holds the most influential power over the region amongst the Southeast Asian community, no South China Sea authorities have been able to enforce or mitigate China's coercive-fishing fleet, the CMM, or their government-backed illegal actions. Ongoing CMM aggressions were a significant issue causing havoc and instigating incidents at sea. As noted from Erickson's research on CMM, the CMM is China's cop-out to use a naval force for the furtherance of state interests by coercing neighboring South China Sea nations as well as the United States without having to engage in military operations directly. The CMM concept expressed as a "first line of militia, a second line of Administrative Law

Enforcement, supported by a third line of the military," in other words, operate blue hulls forward with white and gray hulls supporting from a distance.²⁵³

While the CMM "gray zone" harassment engagements may be challenging to police, the CMM does participate in illegal fishing activities, which could be regulated as they are elsewhere around the world.²⁵⁴ A July 12, 2016 press release from The Hague UNCLOS Tribunal regarding the South China Sea Arbitration between the Philippines and China not only rejects a number of China's excessive maritime claims in the South China Sea, but it also determines that Chinese fishermen engaged in illegal fishing practices in the region and that Chinese authorities were aware of the illegal fishing operations but failed to intercede.²⁵⁵ The report states the Chinese fishermen "engaged in the harvesting of endangered sea turtles, coral, and giant clams on a substantial scale in the South China Sea, using methods that inflict severe damage on the coral reef environment." Furthermore, the Tribunal also found that Chinese fishermen were also connected to the 2012 Scarborough Shoal incident at sea coerced and inhibited a Filipino fishing vessel accessing the shoal.²⁵⁶ The Chinese fishermen actions described in the Tribunal press release correlate directly to the same CMM entities presented in Erickson's work on the CMM, The South China Sea's Third Force: Understanding and Countering China's Maritime Militia, which describes "twelve maritime militia trawlers were netting tons of endangered species at Scarborough Shoal," and how, in 2012, the maritime militia in coordination with CCG closed the Scarborough Shoal approaches to a Filipino fishing vessel.²⁵⁷ Fishing enforcement is the mechanism to hold China accountable for its behavior in the South China Sea.

2. Setting Up A Legal Framework

The creation of a legal structure for accountability that follows multilateral frameworks to enforce the Tribunal's assessment would legitimately impact the South

²⁵³ Erickson, "The South China Sea's Third Force," 1.

²⁵⁴ Ibid., 1.

²⁵⁵ The Republic of the Philippines v. The People's Republic of China, 5, 10.

²⁵⁶ Ibid., 10.

²⁵⁷ Erickson, "The South China Sea's Third Force," 2–3.

China Sea pitfalls. A September 13, 2017 CSIS report on fisheries management in the South China Sea also articulated the need for fishery enforcement because "total fish stocks in the South China Sea have been depleted by 70–95 percent since the 1950s and catch rates have declined by 66–75 percent over the last 20 years." ²⁵⁸ A Congressional Research Service report on China's excessive maritime claims specified that under UNCLOS, there are "no mechanisms for enforcing the Tribunal's award." 259 As discussed, the CMM is identified as China's first and primary means to aggressively enforce excessive maritime claims in the South China Sea. The CMM is also involved in illegal fishing practices in the South China Sea; they are a Chinese government-backed fleet of fishing trawlers.²⁶⁰ As a result, China can continue pursuing lawfully prohibited activities in the South China Sea like coercive territorial enforcement and illegal fishing. A proposed concept is for the United States to aggressively pursue fisheries enforcement agreements through a multi- or bi-lateral agreement with ASEAN members, which would lead to three causal effects. First, it would assist in managing fisheries sustainability and resources. Secondly, it would instill a degree of authority for the United States over the CMM. Finally, it would de-escalate conflict with China in the South China Sea.

3. Enhanced USN-USCG Interoperability In the South China Sea

Increased interoperability between the USN and USCG might aid the South China Sea conflict-prevention conundrum by conserving the ocean environment, enforcing legal fishing regulations, and eventually diminishing conflict. The CSIS proclaimed in a report that illegal, unreported, and unregulated fishing, like that determined by The Hague Tribunal in the South China Sea, is a nontraditional security threat that can be regulated and enforced through regional fisheries management organizations (RFMOs).²⁶¹

²⁵⁸ "A Blueprint for Fisheries Management and Environmental Cooperation in the South China Sea," Center for Strategic and International Studies, September 13, 2017, https://www.csis.org/analysis/blueprint-fisheries-management-environmental-cooperation-south-china-sea.

²⁵⁹ O'Rourke, Maritime Territorial Exclusive Economic Zone, 21.

²⁶⁰ Ibid., 30.

²⁶¹ Poling et al., *Illegal, Unreported, and Unregulated Fishing,* 1–4.

Currently, the United States and Canada hold multiple bilateral agreements through the North Pacific Anadromous Fish Commission, Western and Central Pacific Fisheries Commission and North Pacific Fisheries Commission RFMOs to enforce fisheries on the seas.²⁶² The United States should follow the U.S.–Canadian RFMO framework and form a pact with ASEAN members as a whole or the Philippines, who already shares a mutual defense treaty agreement.

The establishment of a fisheries pact and agreement would enable traction for the use of USCG patrol vessels to operate in the South China Sea with enforcement authority over illegal fishing, which translates to authority over the CMM. Use of USCG cutters acting in fishery enforcement capacities could police CMM activities, and its presence could then deter coercive behavior against in the region. To reinforce the fisheries enforcement concept, the USN could also engage in fisheries enforcement opening new regional USN–USCG interoperability operations, distributed maritime capabilities. The USN has experience with fishery enforcements under from the Oceania Maritime Security Initiative (OMSI), which leverages USCG law enforcement detachments onboard USN warships.²⁶³ In February 2017, the USS *MICHAEL MURPHY* (DDG 112) and USCG LEDET 103 completed 16 fisheries enforcement boardings on an 18-day mission under the OMSI.²⁶⁴

This analysis reinforces assessments such as the USN fishery enforcement model of Kerry Lynn Nankivell, an Asia-Pacific Center for Security Studies Professor based in Honolulu, HI. Nankivell describes a possible USN-Philippine Coast Guard fisheries pact as "a low-risk, high-impact operational response to the recent Permanent Court Arbitration (PCA) ruling in the South China Sea. Permanent fisheries enforcement in the Philippine EEZ might consolidate both the PCA ruling and demonstrate Manilla and

²⁶² "Agreement between the Government of the United States of America and the Government of Canada on Fisheries Enforcement" National Oceanic Atmospheric Administration, 1990.

²⁶³ U.S. Coast Guard, *United States Coast Guard Pacific Area: Strategic Intent Fiscal Years 2015–2019*, (Alameda, CA: USCG, 2016), 4, http://www.pacificarea.uscg.mil/Portals/8/Documents/PACAREA%20Strategic%20Intent%20-%202016%20-%20final%20for%20release.pdf?ver=2017-07-18-160946-617.

²⁶⁴ "Coast Guard, Navy Conduct Joint Oceania Maritime Security Initiative Mission," Coast Guard News, February 28, 2017, http://coastguardnews.com/coast-guard-navy-conduct-joint-oceania-maritime-security-initiative-mission/2017/02/28/.

Washington's joint commitment to the rule of law tangibly and effectively."²⁶⁵ However, Nankivell acknowledges that USN interaction with the CMM poses a risk to escalated violence and should only be used as an intermediary until the establishment of an official ASEAN force.²⁶⁶ Therefore, this view offers more incentives for USCG use as the lead naval force in fisheries enforcement engagement.

It is noteworthy that legitimate fisheries enforcement could still lead to confrontational violence as the result of direct policing and vessel boarding engagements on to Chinese official vessels. However, through United Nations and/or ASEAN country backing, the U.S. would be empowered to instill security onto the region legally. The USN still resides as the number one global navy; fit and capable to execute its duties.²⁶⁷ Through USN–USCG interoperability, the USCG could operate overt-the-horizon from USN units, but still be within weapons range in a turn of events to conflict. Under the distributed maritime capability concept, the USN and USCG could create a new surface action group—termed as a NAVCOGSAG (U.S. Navy - U.S. Coast Guard Surface Action Group). A NAVCOSAG enforcement strategy in the South China Sea empowers the United States to achieve a grander strategy of new and emboldened presence to secure U.S. interests while suppressing CMM aggression and minimizing escalation of conflict in the region. With the increased frequency of USCG cutters in the South China Sea, the United States is enabled to mimic China's naval strategy, having the USCG conduct engagements while the USN idles in the background in the event forceful backup is required.

²⁶⁵ Kerry Lynn Nankivell, "South China Sea: Fishing in Troubled Waters: Could Partnered Fisheries Enforcement be the Best Follow Up to the Recent PCA Ruling?," The Diplomat, August 18, 2016, https://thediplomat.com/2016/08/south-china-sea-fishing-in-troubled-waters/.

²⁶⁶ Ibid.

²⁶⁷ Tangredi, "Globalization and Sea Power," 2; Grove, "Ranking of Smaller Navies Revisited," 16, 19.

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IV. CONCLUSION

The thesis investigated the following question. If conflicts abroad escalate and require greater naval power to protect U.S. security interests, are the U.S. Navy (USN) and U.S. Coast Guard (USCG) prepared to respond through joint operations? The initial hypotheses suggested three scenarios.

- Yes, if conflict erupts, the USN and USCG are already adequately prepared to respond to threats towards the U.S. interests abroad.
- No, the USN and USCG are not adequately prepared to respond to threats as a joint effort, and they do not need to be.
- No, the USN and USCG are not yet adequately prepared for optimal interoperability in response to threats instigating conflicts abroad, and the United States must prioritize the implementation of a distributed maritime capability.

The research concludes that, today, the U.S. Navy and U.S. Coast Guard are not yet adequately prepared for optimal interoperability if conflict should escalate in a forward deployed operating area, and therefore, the U.S. Department of Defense (DOD) should prioritize and increase USN–USCG interoperability via a distributed maritime capability concept.

A. THESIS FINDINGS

1. Potential Conflicts at Sea Threaten U.S. and Allies' Interests

Regional stability and economic security are strategic and vested U.S. national interests because the United States' prosperity intrinsically hinges upon global partnerships. As such, a strong and highly capable U.S. naval force is imperative to preserve the free flow of commerce and protect economic growth.²⁶⁸ U.S. naval forces maintain a forward presence to "defend the homeland, deter conflict, respond to crises,

²⁶⁸ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, vi.

defeat aggression, protect the maritime commons, strengthen partnerships, and provide humanitarian assistance and disaster response."²⁶⁹

The South China Sea, in particular, is significant to U.S. national interests because it is an economic hub for resources like oil and fish as well as a crossroads for global trade. Nations around the world depend on the region's abundant resources and highly trafficked international shipping routes. Although the United States is partially reliant on the South China Sea for its own economic purposes, the United States also relies on South China Sea economics as a force for regional stability. The international trade that passes throughout the region influences rules-based partnerships, which promotes peaceful partnerships.

Specific to the South China Sea, China threatens regional security and economic stability. Their hostile behavior within the region raises severe concerns because their interests and actions provoke conflict in the South China Sea. As of 2015, China's growing naval forces consisted of 303 naval combatants and 205 maritime law enforcement vessels.²⁷⁰ China also chooses to not obey United Nations Conventions on the Law of the Sea (UNCLOS) international laws and norms, and they strong-arm other Southeast Asian nations by claiming Chinese sovereignty over non-Chinese maritime territories and resources. The Philippines, a U.S. ally, is one of a number of nations that China infringes upon with its activities at sea.

2. Current U.S. Naval Forces Need Optimal Force to Meet Threats

Meanwhile, U.S. naval forces—in particular, the USN and USCG—have been operating on a defense-thinning path while competitors invest in military modernization programs. The United States has identified, at a minimum, a refined 355 ship fleet vision to maintain its superior naval advantage. Currently, the USN is 65 ships short of the

²⁶⁹ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, 2.

²⁷⁰ U.S. Department of Defense, Asia-Pacific Maritime Security Strategy, 12–13.

proposed absolute minimum ship-force requirement, and the U.S. shipbuilding plan is not expected to come to fruition until the fiscal year 2046.²⁷¹

USN interoperability opportunities exist to enhance U.S. naval power. Distributed lethality, a form of USN-specific interoperability, is a recent USN strategy employed to manage the ship-deficient challenge and shore up U.S. naval force capabilities. This thesis finds that distributed maritime capability, a concept to increase USN-USCG interoperability to optimal strength, expands the USN distributed lethality concept by adding the USCG as a force multiplier.

The USCG is widely known for its maritime rescue and first response service; however, it is first a militarily capable coast guard force because it bolsters U.S. naval power as is evident from an extensive naval history. Highly reliable, the USCG is unusually well equipped to operate abroad. Before maritime security and policing operations post-9/11, the USCG was militarily empowered and fought amongst the other U.S. military service branches in all of the United States' twentieth century's major conflicts from World War I to the Gulf Wars. Contemporary USCG missions are critical to law enforcement and interdiction combating drug-trafficking, proliferation, and piracy. Through interoperability opportunities, the USN and USCG, when partnered, proved able to maximize mission performances engaged in maritime interdiction operations (MIO). Recognized and reinforced over time, fundamental characteristics of successful USN–USCG interoperability have included developing a sense of trust, learning capabilities through naval force familiarity, adapting in command integration, and understanding the value of proportionality.

3. Distributed Maritime Capability Answers Force Multiplier Need

The thesis showed the success and utility of the USCG as a proponent to the USN through fisheries enforcement in the South China Sea. The Chinese Coast Guard (CCG) and Chinese Maritime Militia (CMM) are critical enforcers to China's maritime territorial claims in the South China Sea. Countering aggression from the CMM is more of a security issue than the CCG because the USCG and CCG share a fundamental

²⁷¹ O'Rourke, Navy Force Structure and Shipbuilding Plans, 3.

relationship through decades of fishery enforcement partnerships and cooperative engagements via countering illegal high seas drift net fishing in the North Pacific Ocean.

The CMM is China's national fishing fleet, which uses its fishing persona as a means for de-associating itself from the military and maritime law enforcement authorities to harass and undermine all nations and organizations who defy or attempt to inhibit China's interests. Furthermore, China's fishing trawlers, the CMM, are connected to multiple incidents at sea between ASEAN members and the United States as well as illegal fishing practices. Fisheries enforcement in the South China Sea has the potential to mitigate CMM illegal activities and deter CMM maritime harassments. Similar to drug-trafficking enforcement and countering piracy, fisheries enforcement is a subset of MIO and capable mission of the USN. The USN and USCG effectively partnered in the North Ocean and Oceania regions to police illegal fishing. The USN–USCG fisheries enforcement interoperability would translate well to the South China Sea.

B. RECOMMENDATIONS

This thesis recommends DOD to consider a number of potential ideas based on USN and USCG optimal interoperability to bolster U.S. naval forces and preserve U.S. national interests, specifically regional security and economic stability.

- Initiate DOD and DHS discussions to fund and support optimized USN–USCG optimal interoperability missions.
- Employ the distributed maritime capability concept to bolster U.S. naval forces. Integrate USCG cutters into USN surface combatants to form U.S. Navy U.S. Coast Guard Surface Action Groups (NAVCOGSAGs).
- Once applied, the NAVCOGSAG could partner with UN and/or ASEAN
 member naval forces to prevent conflict escalation in the South China Sea.
 However, the United States must first form a South China Sea fisheries
 enforcement pact with the UN and/or ASEAN members, such as the
 Philippines.
- Deploy a NAVCOGSAG to the SCS to conduct fisheries enforcement and impose international laws with the intention to attain regional security and economic stability.

C. FUTURE RESEARCH

Future research toward continued optimal interoperability is needed. The distributed maritime capability is flexible and applicable to other regional areas like the Arctic. The USCG possesses ice-breaking technology and retains areas of responsibility in the Arctic. With the Arctic becoming more accessible to maritime shipping, does the USN have a role to play in the region? Could a NAVCOSAG framework be applied in the Arctic? If the USCG would entertain the idea of reinforcing USN-led defense operations abroad, how many USCG cutters could the USCG afford to deploy while maintaining effective homeland security missions? What is the right number of USCG cutters required to operate with the USN abroad? How much funding would the USCG need for the distributed maritime capability to come to fruition? These questions are only a few of many that future researchers could address.

D. SIGNIFICANCE

Fisheries enforcement is the USCG's foot-in-the-door to gain a legal security advantage over China's pervasive and intrusive naval forces, but not the ultimate motive for optimal USN–USCG interoperability. USN–USCG fisheries enforcement in the South China Sea demonstrates the significance of bolstering joint naval interoperability by applying the distributed maritime capability concept. With joint USN and USCG assets patrolling the South China Sea, U.S. naval forces gain the opportunity to expand their reach of sea control from the high seas to the littorals with a good-natured reputation, yet still harness the firepower to respond if a turn of events to conflict were to occur.

In part of the grander U.S. naval Pacific strategy, the ideal naval South China Sea strategy might implement distributed maritime capability to commit USCG Cutters to the region and design a NAVCOGSAG in order to: instill regional security and economic stability, bring good order at sea, mend relationships torn over maritime territorial disputes, and prevent the risk of escalated conflict. However, the world in and of itself is not ideal for optimum conditions and circumstance, nor does it offer infinite resources. Not only is the USN facing naval pressures and constraints that detract from U.S. supreme naval power, but so too is the USCG, specifically regarding the shortcomings of

its small size and increasing age. Perhaps this study will offer new insights and perspectives presenting incentives to resuscitate the USCG's flat operating budget to innovate solutions that respond to the United States' need to retain the naval edge over rival competitors. The future looks promising with the opportunity for U.S. Navy-U.S. Coast Guard optimal interoperability as a core strategy to advance U.S. naval force strength both abroad on the high seas and closer to U.S. shores, all for enhancing U.S. homeland security.

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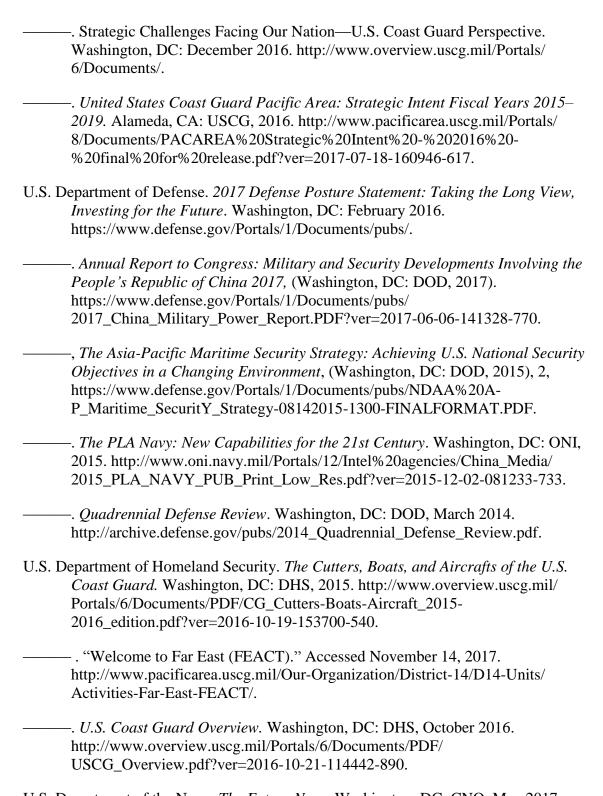
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